

Instructions for Authors

Updated June 2019

The Auk: Ornithological Advances

www.editorialmanager.com/auk/

The Condor: Ornithological Applications

www.editorialmanager.com/condor/

The Auk: Ornithological Advances and *The Condor: Ornithological Applications* are double-blind peer-reviewed journals published by the American Ornithological Society (AOS). Send inquiries about the suitability of an article topic for *The Auk* or *The Condor* to AOSpubs@AmericanOrnithology.org. Both publications publish original material that has not been published elsewhere.

1. Choosing the Publication

The Auk: Ornithological Advances

T. Scott Sillett, Editor-in-Chief ssillett@americanornithology.org

The Auk: Ornithological Advances publishes original research from all parts of the globe that tests fundamental, scientific hypotheses through ornithological studies and advances our understanding of living or extinct bird species. Descriptive studies are considered if they present new taxonomic information about birds, such as scientifically rigorous descriptions of new species, or important discoveries that open novel avenues of fundamental, ornithological research.

Evolutionary history and paleontology • Systematics and nomenclature • Behavioral ecology • Foraging strategies and tactics • Population biology and ecology • Molecular ecology • Community and landscape ecology • Migration and orientation • Spacing patterns and habitat use • Genetics and genomics • Epigenetics and evolutionary development • Physiology and biochemistry • Morphology and anatomy • Integrative and cross-disciplinary studies • Theoretical and methodological advances • Thematic reviews and opinion pieces

The Condor: Ornithological Applications

Catherine Lindell, Editor-in-Chief clindell@americanornithology.org

The Condor: Ornithological Applications publishes original research, syntheses, and assessments from all parts of the globe focusing on the application of scientific theory and methods to the conservation and management of birds and the application of ornithological knowledge to conservation and management policy. *The Condor* also seeks interdisciplinary papers that integrate biological, social, and/or economic data to, for example, document the value of ecosystem services provided by birds, the consequences of

particular conservation actions, or the impact of energy projects on birds. *The Condor* aims to reach research ornithologists and practitioners.

Population biology, including threats to birds • Conservation and management issues • Conservation genetics • Community and landscape ecology • Ecosystem services and disservices of birds • Restoration of bird taxa and their ecological functions in degraded landscapes • Effects of habitat alteration and fragmentation • Responses to climate change • Anthropogenic effects on genetics, behavior, or physiology • Avian diseases and disease transmission by birds • Birds in urban and agricultural landscapes • Sociological and economic studies related to birds • Theoretical and methodological advances in practice •

2. Choosing the Article Type

Choose either **Research Article** or **Correction** in the online submission system. For **Reviews**, **Perspectives**, and **Commentaries**, please contact the target journal's Editor-in-Chief at AOSpubs@AmericanOrnithology.org prior to submission; upload your submission as a **Research Article**, with the article type written on the title page.

Research Articles are full-length papers (20–30 double-spaced manuscript pages inclusive of all content except supplementary material) and the standard article type. An abstract is required (350-word limit).

Reviews summarize research and are a synthesis of existing data and theory, with the promise of having a broad influence on the ornithological community (20–30, double-spaced manuscript pages inclusive of all content except supplementary material). An abstract is required (350-word limit). Please discuss with the target journal's Editor-in-Chief before submission, and when submitting put the word **Review** at the top of the Word file.

Perspectives are short papers that address timely topics or recent advances in ornithology (5–15 double-spaced manuscript pages inclusive of all content except supplementary material). Invited Perspectives may accompany an article or Special Feature published at the same time. An abstract is required (350-word limit). When submitting, put the word **Perspective** at the top of the Word file.

Commentaries address factual or interpretation issues in previously published articles (5–15 double-spaced manuscript pages inclusive of all content). Commentaries are assigned to an Associate Editor and reviews are solicited from two subject matter experts. Authors of the original article are given the opportunity to respond to a Commentary. We will expedite the review process for Commentaries and responses. We do not publish responses by Commentary authors. An abstract is not required. When submitting, put the word *Commentary* at the top of the Word file.

Book Reviews. Submit to the Book Review Editor Jay Mager at j-mager@onu.edu, not through the online submission system. Book reviews should be objective and fair evaluations of the book's contents (and not stray from them). Book Reviews are subject to review by the Editor-in-Chief.

Memorials. Submit to the Memorials Editor, Ted Anderson, ted020@centurytel.net, not through the online submission system. See Memorials guidelines under Memorials in the ORNITHOLOGY STYLE SHEET below.

3. Special Features

The Auk and *Condor* welcome proposals for thematic **Special Features** (e.g. a set of papers based on a symposium at an AOS meeting). A **Special Feature** can represent all or part of a journal issue. The collection of Research Articles must address a topic of broad interest to ornithologists. Manuscripts for **Special Features** are rigorously peer-reviewed like standard submissions and may require extensive revision or be rejected. Proposals for Special Features should be addressed to the target journal's Editor-in-Chief at AOSpubs@AmericanOrnithology.org and include a brief overview of the topic and a list of tentative titles and authors. A Special Feature's convener may be asked to serve as a guest Associate Editor and is encouraged to write a Perspective paper to accompany the articles.

4. Double-Blind Peer Review

Manuscripts selected for review undergo a double-blind peer review process, which means that the identity of authors and reviewers are concealed (i.e., authors do not know the identity of reviewers; reviewers do not know the identity of authors). As in the past, reviewers may sign their reviews if they choose. For the purposes of blind review, we ask authors to remove identifying information (e.g., author names, institutional information) from the main manuscript. However, this information is included on a separate title page, which is not available to reviewers.

5. Specifications to Follow in Preparing Your Manuscript for Double-blind Peer Review

Publication Ethics

Authors should observe high standards with respect to publication best practice. Falsification or fabrication of data, plagiarism, including duplicate publication of the authors' own work without proper citation, and misappropriation of work are all unacceptable practices. Any cases of ethical or publication malpractice are treated very seriously. We expect authors to follow the Commission on Publication Ethics (COPE) guidelines (<http://publicationethics.org/resources/guidelines>).

Title page

The title page will remain separate from the manuscript throughout the peer review process and will not be sent to the reviewers. It should include:

- The manuscript title
- All authors' names and affiliations
- A complete address for the corresponding author, including an e-mail address
- Acknowledgements
- Data availability

Anonymized manuscript

Please remove any identifying information, such as authors' names or affiliations, from your manuscript before submission.

As well as removing names and affiliations under the title within the manuscript, other steps need to be taken to ensure the manuscript is correctly prepared for double-blind peer review. The key points to consider are:

- Use the third person to refer to work the authors have previously published. For example, write “Black and Hart (2015) have demonstrated” rather than “we/the authors have previously demonstrated (Black & Hart, 2015)”.
- Make sure that figures and tables do not contain any reference to author affiliations
- Exclude acknowledgements and any references to funding sources. Use the title page, which is not sent to reviewers, to detail these and to declare any potential conflicts of interest to the editor.
- Choose file names with care, and ensure that the file’s “properties” are also anonymized. If you are using Microsoft Office 2007 or later, consider using the Document Inspector Tool prior to submission.

6. General Specifications to follow

Page limit is 25,000 words (about 70 pages when double-spaced with 12 pt. Times New Roman type) for journal articles.

Double-space all text, including figure captions and Literature Cited, using 12-pt. Times New Roman or other common typeface. Margins should be 1-inch all around on pages of 8.5” by 11” size. Do not justify the right margin (choose left-justified, not full-justified). Line numbering should be continuous throughout the manuscript. Do not restart line numbers for each page. Do not include headers or footers. Insert page numbering.

Order the sections of your anonymized manuscript in this way: Abstract with Keywords, Foreign Language Abstract with Keywords (if you are providing it yourself), Introduction, Methods, Results, Discussion, Acknowledgments, Literature Cited, Figure Captions, Appendix, Tables, and Figures. If you have a Conclusion section, list it as a subheading within the Discussion section. Tables and Figures may be saved in separate files. Supplemental data should be included in the paper where possible.

Figure guidelines. Figure resolution should be 300 dpi for halftones (photographs) and color figures and 600 dpi for B&W line art (graphs & plots). Put figure numbers on each figure file (they will be cropped out). For a one-column figure, the width is 3.5”; for a two-column figure, the width is 7”. Cite each figure in the text in numerical order (except for Appendix figures, see below). Spell out the word Figure in citations and figure captions (Figure 1, Figures 2 and 3, Figure 1A, 1B). Figure citations from another work should use the word “figure” with lowercase “f” such as (figure 2 in Smith 1980). Figures should be simple and easily comprehended without reference to the manuscript text. Once accepted, a paper’s figures must be submitted as high-resolution figures of 600 dpi in .tif, .eps, or .pdf formats. Figure captions should not repeat information already presented in text or tables. Use capital letters for figure parts in the figure caption: (A), (B), etc. Bold the letters but not the parentheses. For sound spectrograms (sonograms), use the actual tracing if it is sharp, clear, and relatively short. If intensity differences are not important, then submit a high-contrast digital image that meets the above specifications. Label all axes in a sans serif font (Arial, Calibri, Helvetica), use sentence case labels (only the first word is capitalized unless it is a proper noun). You can group related illustrations as panels into a single figure file (Figure 1 would include 1A, 1B, 1C, 1D) so that they can be placed together on the same page/screen.

Mark each section of the figure A, B, C. If necessary, you may submit each part of a figure as a separate file as long as it is clear how to combine the parts into one figure for publication. When mixing figure citations in the text of your manuscript with reference citations, use a semicolon: (Figure 1, Figure 2A and 2B; Jones and Johnson 1978). Appendix figure numbering should follow from the figure numbers in the rest of the manuscript, i.e. the first figure in Appendix A may be Figure 5. It should be cited as “Figure 5 in Appendix A”, or “Appendix A Figure 5”.

Table guidelines. See Table guidelines in the ORNITHOLOGY STYLE SHEET below under Tables.

File formats. For the manuscript: Word (.doc or .docx), WordPerfect (.wpd), or Rich-text format (.rtf). For tables: Word (.doc or .docx), Excel (.xls or .cvs), or Turbo (.tds). For figures and images: .doc, .jpeg, .tif, .gif, .eps, png., .pdf or .ppt. Final figures will need to be in .tif, .eps, or .pdf format. For supplemental data: .doc, .html, .mpeg, .xls, source code, .zip. For video files: Quicktime, MPEG, and AVI. For Audio files: MP3, AAC, and WMA.

Paragraph structure. Ensure that all paragraphs start with topic sentences, even in Methods and even when paragraphs have sub-headings. Pay close attention to the narrative flow of the paper — specifically the logical hand-off of themes from one paragraph to the next. Where appropriate, paragraphs should end with a concluding sentence that provides a thematic transition to the next paragraph. Use sub-headings sparingly and avoid one- or two-sentence paragraphs. These disrupt a paper's narrative flow and make it read like a Powerpoint presentation.

See the ORNITHOLOGY STYLE SHEET (see page 9) and SAMPLE ARTICLE FORMAT (see page 22) for additional style items including formats for author byline, footnotes, tables, references, and for scientific terminology. For items not in the STYLE SHEET, see Scientific Style and Format: The CBE Manual for Authors, Editors, and Publishers, Fifth, Sixth, or Seventh Editions and the Merriam-Webster Collegiate Dictionary.

7. Supplemental Materials

Upload supplemental files at the time of article submission online. Supplemental materials are not essential to the primary message of the paper and may include methodological details, ancillary results and discussion, tables that span multiple pages, maps, and figures. Please name and cite all supplementary files this way: Supplemental Material Appendix A or Supplemental Material Table S1 or Supplemental Material Figure S1. Combine supplemental material into one file when possible. Smaller items of supplemental material will be moved to the manuscript itself (e.g., tables and figures that can each fit on an 8.5 x 11” page) and placed in an Appendix at the end of the paper.

8. Data Archiving Policy

Starting on March 1, 2019, for all new submissions to *The Auk* / *The Condor*, as a condition of publication, authors must deposit all primary data and relevant, non-proprietary computer code in a permanent, secure, public repository. All analyses reported in an article must be repeatable using the archived data. Except for nucleotide and protein sequences archived with GenBank, the preferred repository is Dryad, which is integrated with the submission system at Oxford University Press. The Editor-in-Chief will consider alternative repositories

that issue a persistent identifier such as a DOI or accession number. Authors are encouraged to archive bird tracking data at the Movebank Data Repository and audio, photo, and video media at the Macaulay Library.

Upon article acceptance, authors will be asked to declare the repositories that they will use; authors who choose Dryad (<http://www.datadryad.org>) will be sent a link for data upload. Data must not be uploaded as an article's Supporting Information. Articles will proceed to publication only when data have been archived and a DOI or accession number provided. The American Ornithological Society will cover the cost of data deposition if the paper's lead or corresponding author is a Society member.

Authors who prefer not to archive their data with Dryad will need to provide a DOI or accession numbers in the submission. The journal will not be responsible for securing DOIs or accession numbers or covering the costs of archiving the data.

A "Data Depository" section must be included after the Acknowledgements section in the final version of the manuscript, following this example: "Analyses reported in this article can be reproduced using the data provided by Author (2019)." Dataset(s) are given in the reference list in this format:

Author. (2019). Data from: Title of original article. *The Auk / Condor*. Data DOI or URL.

Data may be made publicly available at time of publication or authors may embargo access for 12 months after publication. Exceptions may be granted at the discretion of the Editor-in-Chief, especially for sensitive information, such as the location of endangered species. Authors must provide a short explanation in the Data Availability section when the standard availability requirement has been modified or waived.

The Auk / Condor promotes ethical re-use of data. Original data sources must be cited. We recommend that authors who re-use published data seek to collaborate with the original data providers when appropriate.

Any questions about the journals' new data archiving policy or help with Dryad should be directed to AOSpubs@AmericanOrnithology.org.

9. Design and Study Standards

Please include design transparency in the article. Article should state whether preregistration or preregistration with analysis plan of study exists, and, if so, where to access it. *The Auk and Condor* encourage submission of replication studies.

10. Nomenclature

All nomenclature papers must be registered with ZooBank prior to publication and include the Zoobank registration information in the manuscript Word file or the final PDF proof.

11. English as Second Language

Authors whose native language is not English are encouraged to enlist the aid of a native English speaker to review the manuscript for clarity and correct usage. Manuscripts that do not meet linguistic standards may be returned without review.

12. Uploading Your Manuscript

1. Go to <http://www.editorialmanager.com/auk/> or <http://www.editorialmanager.com/condor> and choose either Auk or Condor to log in. Search for your name on the login page, and if you do not find it, then register as a new author. You can also login using your ORCID id. Please provide an email address for all co-authors, as all co-authors must verify the submission. You can save and exit at any time in the process and come back later to where you left off by logging in again as an author and choosing the Incomplete Submission link.
2. Answer the submission questions. Some are required and are indicated by an asterisk (*), some are requested. For the foreign language abstract question, choose a language (French, Portuguese, or Spanish) or choose "Other". If you choose "Other," then provide that translation yourself in your manuscript. If you upload your own foreign-language Abstract, please use only the scientific names for birds, not common names. For example, the abstract text "Blue Jays (*Cyanocitta cristata*) build nests in trees..." would be translated into Spanish as "*Cyanocitta cristata* hacen sus nidos en árboles..."
3. Upload your files and approve the merged PDF.

13. Checking the Status of Your Manuscript

After you approve your manuscript submission, you are finished with the submission process and no longer have access to modify files or information about your manuscript. The manuscript will enter the submission queue, and you and your coauthors will receive a confirmation email with the assigned manuscript number. The publication office will contact you if there are any issues with your files.

You can access the status of your manuscript at any time by logging in and selecting Submissions Being Processed in the New Submissions box. Under Current Status, you can see the stage of your manuscript: Incomplete; With the Editor; Under Review; Revise; Completed, Accept; or Completed, Reject. You can use Send Email if you need to correspond with the publication office.

14. Your Manuscript in Revision

For papers that had a previous decision of major revisions or minor revisions, there will be a one-month deadline to submit a revision. We realize that some major revisions may take longer, while some minor revisions can sometimes take only one week. You may request an extension from the Editorial Office at AOSpubs@AmericanOrnithology.org.

15. Your Accepted Manuscript

Decision letter. After your manuscript is accepted for publication, review the information in the decision letter.

Transfer to Oxford University Press. Your manuscript will be transferred to Oxford University Press (OUP) for copy editing and typesetting. Your accepted manuscript will be copyedited to conform to scientific, technical, stylistic, and grammatical standards.

Oxford University Press will email you a release form that you will need to sign and return to them. They will also email you the page proofs of your article with possible queries for

you to answer. Please return any proof corrections and your release form as soon as possible to OUP. Any delay in returning corrections or the release form may delay the publication date of your paper.

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If you are **not** a member of the AOS you will be invoiced \$100 per page; there are NO waivers. We urge all authors to join the AOS to access this special membership benefit.

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Embargo. Journal Authors can send out their own press releases one week before the publication date, and are free to post their articles on their own website or their institution's website and to promote their work once their article is published online and they have received the final published PDF article. Let us know when your work is cited in the media by emailing AOSpubs@AmericanOrnithology.org

16. Publicity for Your Published Article

Altmetrics: Once any article is published online at <https://academic.oup.com/aosjournals>, you can see the media attention it is receiving. Go to the article on the Journal website and in the right column you will see the Altmetrics symbol with a number. Choosing it will show you a list of the number of news articles, blog posts, tweets, Facebook posts, and Mendeley and Cite-U-Like readers your article has. More specific information is available if you click through.



Social Media: All papers published in The Auk and The Condor will be tweeted about on the official AOS Twitter account at twitter.com/amornith. Selected papers may also be posted to the AOS Facebook page (facebook.com/amornith) and/or Instagram account (instagram.com/amornith).

Blog: All authors of Auk and Condor papers have the option of submitting a post to the AOS blog. The AOS Communications Specialist will provide blog post guidelines and work with you to edit your writing and produce a finished piece. If interested, contact rheisman@americanornithology.org.

Press Releases. Press releases will be produced to promote selected Auk and Condor papers of potential public interest to the science news media. If your paper is selected for a press release, you will be contacted by either AOS or Oxford University Press.

17. Rights and Permissions

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ORNITHOLOGY STYLE SHEET

This will be used by the copyeditors to style your article if accepted.

a priori and **a posteriori**. Not italicized because they are in the English dictionary.

Abbreviations. Minimize the use of nonstandard abbreviations or acronyms that readers must memorize to follow your paper. Spell out any abbreviations at first usage with the abbreviation in parentheses.

Acknowledgments. The Acknowledgments section is made up of 5 sections: (1) Thank you to your sponsors and everyone in the field or lab who helped with your research as well as reviewers; (2) *Funding statement*: List your funding sources. You will also be asked your funding sources when submitting your article; (3) *Ethics statement* (see below); (4) *Author contributions* (see below); and (5) *Data availability* (see below).

Abstract. Maximum word count is 300. Avoid long lists of common methods or discursive explanations of what you set out to accomplish. Abstracts should provide a brief summary of the research, including the purpose, methods, results, and major conclusions. Do not include citations in the Abstract. Authors are encouraged to submit a technically competent foreign language abstract, or else the Journal will provide one in Spanish, Portuguese, or French. When you submit your paper, you are asked which of the three languages you would like your Abstract translated into. Choose Other if you are submitting an abstract in a language other than those three.

Affiliation. See **Author** names.

And/or. May be used where appropriate.

Antarctic. Capitalized.

APPENDIX or APPENDICES. If more than one appendix, label APPENDIX A, APPENDIX B. Tables and figures within appendices should follow the numbering after other tables and figures in the paper, so in a paper with 4 regular tables, the first table in the Appendix is labeled **Appendix Table 5**, and its citation within the paper would be **Appendix Table 5**. Similarly, in a paper with 5 regular figures, the first figure in the Appendix is labeled **Appendix Figure 6**, and its citation within the paper would be **Appendix Figure 6**.

1. Please note that an appendix table or figure can be cited before a regular table or figure, so

we can have the citation for **Appendix Table 5** appearing before the citation for **Table 1**. Remember: *The citation placement does not change the numbering of appendix tables or figures.*

2. Do not include references in the Appendix. All references should be included with the Literature Cited section of the main paper.

Approximately. Use the tilde symbol (~) before numbers instead of approximately: ~90%, not approximately 90%.

Arctic. Capitalized.

Author contributions are required in the Acknowledgments section. Put author names next to the categories listed below. Not all categories need be used. These categories are not meant to prescribe authorship, but to describe the contributions of the stated authors. Broad areas of author contributions can include:

1. Conceived the idea, design, experiment (supervised research, formulated question or hypothesis)
2. Performed the experiments (collected data, conducted the research)
3. Wrote the paper (or substantially edited the paper)
4. Developed or designed methods
5. Analyzed the data
6. Contributed substantial materials, resources, or funding. (Smaller resource contributions and people who are not authors of the paper can be listed in the general Acknowledgments section text.)

Author names in the byline. List authors with superscripted numbers to indicate affiliations at the time the research was conducted. List institutional affiliations under the authors' names. Include the email address of the corresponding author with an asterisk before it, and put an asterisk after the author's name in the byline after the last affiliation superscripted number. Do not superscript the asterisk (an asterisk is already a superscript). Above the corresponding author email address, include any other footnotes such as # These authors contributed equally to the paper. † This author is deceased. * The corresponding author information is placed last. Individuals listed as authors should have played a significant role in designing or carrying out the research, writing the manuscript, or providing extensive guidance on the execution of the project. Those individuals whose role was limited to providing materials, financial support, or review should be recognized in the general Acknowledgments section not on the Author Byline.

Biogeographical realms. These regions are capitalized: Neotropic and Neotropical, Antarctic, Arctic, Holarctic, Palearctic, and Nearctic.

Bonferroni correction. (not Bonferroni Correction)

Boolean. (not boolean)

Capitalization. Proper names: Hairy, Downy, and Ivory-billed woodpeckers (when multiple groups are named together). Hairy Woodpecker. Downy Woodpecker. Ivory-billed Woodpecker. (when

named alone) Mississippi and Missouri rivers. (when named together) Mississippi River. (when named alone). Lakes Erie and Superior.

chi-square. (not Chi-square); χ^2

Citation order. Lists of Literature Cited citations within the text of the manuscript should be placed in chronological order (Smith et al. 2002, Abernathy 2007, Cato 2009, Benoit et al. 2011); not in alphabetical order.

Company names and commercial product names. Use this style for products, companies, and company location: Predation MP3 Game Caller (Western Rivers, Lexington, Tennessee, USA). No trademark or registered trademark symbols. Remove Inc. or Co. of Ltd. Or GmbH, etc., from company names.

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Cover art. Photos may be submitted for cover art. They need not be figures from a submitted article. Make sure they are high resolution for the large format of the journal covers. Send to AOSpubs@AmericanOrnithology.org

Data. This is a plural noun, carrying a plural verb: *Data were too few to assess significance.*

Data citations. Cite all data used, even from outside sources, in the main text of the paper, even if the datasets are referenced in supplementary material or appendices.

Data availability. Authors must deposit all primary data and relevant, non-proprietary computer code in a permanent, secure, public repository as a condition of publication. A "**Data availability**" section must be included after the Acknowledgements section in the final version of the manuscript, following this example: "Analyses reported in this article can be reproduced using the data provided by Author (2019)." Dataset(s) are given in the reference list in this format: Author. (2019). Data from: Title of original article. The Auk / Condor. Data DOI or URL. See **Section 7. Data Archiving Policy** for more information.

Dataset. Dataset is one word.

Dates. Use American dating (September 29, 1992).

Day of the year. Refer to the ordinal date (number) 1 to 366. [This is not the Julian date.]

Deceased authors. See Author names.

Decimals. No naked decimals except with caliber: .410 shotgun. Otherwise, 0.17. Probability rounded to two decimal places unless $P < 0.01$, in which case round to three decimal places; use $P < 0.001$ as the smallest P -value.

Degrees of freedom: df (roman, not italic); in *F* statistics, instead of the subscript format ($F_{1,36} = 36$), use the format: $F = 36$, df = 1 and 36

DISCUSSION section. It is useful to start the Discussion with a statement that summarizes the main results. The Discussion should develop the significance and importance of the Results and set them into a framework of previous research. The Discussion should follow logically from the Results. Additional statistical tests and results are usually inappropriate here and should be presented in the Results section, except in unusual cases.

Document format. Page size of 8.5 x 11-inch format, double-spaced throughout, one-inch margins, left-justified.

e.g.: (i.e. for example) takes a comma and is roman (e.g.,)

Email. One word, email.

Ethics statements. Third section of the Acknowledgments. You may state any Ethics guidelines that you followed, including your institutions' guidelines.

Equations. Center long equations on the page. Indicate where long equations should have a line break. Use MathType to create equations (it is an add-on program to Word). Put spaces around operators such as = , + , etc. Use bold and italics where appropriate for symbols (see Symbols). Number multiple equations in a paper (1), (2), etc. and place the labels on the right-hand margin, with the equation centered. In the text cite equations as Eq. (1) or Eq. (2) etc.

Footnotes. No footnotes allowed in the text. Put footnote information in the text. Footnotes may be used in tables.

Funding statement. Second section of the Acknowledgments. List your funding sources. You will also be asked your funding sources when submitting your article.

Gene or amino acid sequences. Must be deposited in GenBank or an equivalent repository and the accession numbers reported in Methods and in the Data availability section in the Acknowledgments.

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bounding box should be included in the article and the polylines or polygons defining the study area should be included. Coordinate values should be given in a latitude and longitude format (WGS84 datum). Coordinates should be given as latitude first, and then longitude separated by a comma and in decimal degrees format (e.g., 51.4509°N, 2.5850°W), rather than in degrees, minutes and seconds format (e.g., 51°27'32"N, 2°35'63"W). Use letters after the coordinate value to designate the hemisphere (i.e. 'N' or 'S' for latitude, and 'E' or 'W' for longitude) rather than negative signs for south latitudes and west longitudes. If you are defining a boundary box, provide the range of latitudes first separated by a hyphen followed by the range of longitudes. Use a comma to separate latitude and longitude values for a bounding box, e.g., '51.4509°N–3.4582°N, 2.5850°W–3.2359°W'. In cases where the decimal degrees coordinate format is inappropriate (e.g., polar regions) and a different coordinate system is used, please provide all of the information necessary to transform those coordinates to another coordinate system. Location names should be sufficiently detailed in order to be unequivocal. Resources for coordinates and location names include: [GeoNames](#), [Geographical Database](#), [Getty Thesaurus of Geographic Names](#), [GEOLocate](#), [Google Earth](#).

Holarctic. Capitalized.

Headings. Main headings such as **INTRODUCTION, METHODS, RESULTS, DISCUSSION, ACKNOWLEDGMENTS, LITERATURE CITED, and APPENDIX** should be in all caps and flush left and bold. Second-level headings should be flush left and bold in title case (each word capitalized); third-level headings are bold in sentence case (with only the first word of the heading capitalized) with a period at the end, run in to the indented paragraph; fourth-level headings are the same as third-level headings except they are italic instead of bold. Text immediately following an H1 heading or a H2 heading should not be indented.

Hyphens. Do not use one hyphen to imply the rest of a word unless you use the second hyphen as well. For instance, do not use inter- and intrasexual, as they are not parallel. Correct usage would be “inter- and intra-sexual”. To avoid the problem, use intersexual and intrasexual, for instance. Use hyphens only when necessary for meaning.

i.e.: (that is) no comma necessary and is not italicized (i.e.)

Internet. Internet is capitalized.

INTRODUCTION section. It should provide the aims and significance of the research and place it within the framework of existing work. Limit the use of citations; in general, there are few points that cannot be supported by three or fewer citations. Long lists of citations are seldom required and detract from the readability of the manuscript.

Italics. Limit the extent to which italics are used for emphasis. Foreign words are italicized if they do not appear in the American English dictionary (Merriam-Webster, Merriam-Webster Collegiate, or Webster’s Third New International Dictionary Unabridged).

Keywords. 1 to 8 keywords. List after the Abstract. Put the word “Keywords” in italics. Keywords should be listed in alphabetical order. Keywords may repeat words in the title of the paper.

Latin terms. Leave roman if they are in the American English dictionary (Merriam-Webster, Merriam-Webster Collegiate, or Webster's Third New International Unabridged). Latin terms and other non-English words that do not appear in the American English dictionary are to be italicized.

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Single authors precede multiple author citations for the same first author, regardless of date. List up to 12 authors (if there are more than 12 authors, then list 11 of them and et al.). Journal names should be spelled out. Book titles should be capitalized. For unpublished materials, cite this way in the text: (K. P. Able personal communication). For in press, put “In press.” at the end of the reference. If the year is not known, then put the “(In press)” where the year would go, after the authors' names. Capitalize title words if they are capitalized in the original publication. Capitalize all species names in references titles. Same year/same author references should use a and b after the year, and be listed first alphabetically (single author first, then 2 authors, then 3 or more authors), and then chronologically within each of those alphabetical groups. In-text citations can cite a year(b) reference before a year(a) reference.

Please note that for *Condor* volumes 1–115, the correct journal title for the *Condor* should be **The Condor**; for volumes 116 and later it is **The Condor: Ornithological Applications**. For *Auk* volumes 1–130, the correct journal title is **The Auk**; for volumes 131 and later it is **The Auk: Ornithological Advances**.

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2. Set display equations in MathType. Each display equation should be in its own MathType object. Each MathType object should contain the entire equation, including final punctuation. Equation numbers should be set as Microsoft Word regular text, outside the MathType object, flush right, on the right-hand margin in the format: (1).

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Memorials. An *In Memoriam* essay in *The Auk* or *The Condor* is meant to be a scientific obituary, with only a brief amount of personal information. The typical length is 750–1,500 words, with a maximum of 1,800 words. Include information about AOS or AOU or Cooper Society membership (i.e. Lifetime Membership), honors, awards, and service (such as officer, board, and committee posts). Do not include a resume, publications list, or course list. Please supply a large, high-resolution photograph of the person (at any age), preferably taken in the field and in color, as a jpeg or tif file.

When possible and appropriate, include the following information in your essay:

- Early life and when and how the person became interested in birds.
- Formal and informal education; military service.
- Development of person's areas of scientific interest, and influences.
- Contributions to scientific ornithology, major research areas, books and important papers written.
- Number of Ph.D. dissertations supervised.
- Professional life, honors and awards, academic appointments, and volunteer work related to ornithology, including Society contributions.
- Other professional work, related careers.
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- Send submissions to the In Memoriam Editor, Ted R. Anderson (ted020@centurytel.net).

Meters above sea level. m.a.s.l. Spell out on first mention, abbreviation after.

METHODS section. This section should provide enough information for the reader to be able to replicate and critically evaluate the research. Describe statistical tests and procedures. Cite statistical software and analysis programs. End the statistics section with a statement to the effect that the values reported in the **RESULTS** section are means \pm SE or SD.

Millions of years. myr

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Nearctic. Capitalized.

Neotropic. Neotropic and Neotropical are capitalized.

Nomenclature. All nomenclature papers must be registered with ZooBank prior to publication and include the Zoobank registration information in the manuscript Word file or the final PDF proof. Any proposed new species descriptions and nomenclature in an article will be reviewed by the Working Group on Avian Nomenclature of the International Ornithologists' Union. The following sentence will appear in the Acknowledgments: "The nomenclature in this paper has been reviewed by the Working Group on Avian Nomenclature of the International Ornithologists' Union."



Numerals. Use numerals for all numbers except one and zero. Use 0 and 1 when used in measurements or with other numerals in the same sentence (this is from the Council of Science Editors 7th edition). Use commas for numbers with thousands and millions, 5,247. Precede decimal fractions by a zero (0.97, not .97). Do not use slant lines in units of measure; instead, use the exponential form or the word "per" throughout text, tables, and figures (use kJ day⁻¹, not kJ/day).

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***P* value and *p* value.** Italicize *P* and *p*. Probability rounded to two decimal places unless $P < 0.01$, in which case round to three decimal places; use $P < 0.001$ as the smallest *P* value.

Palearctic. Capitalized.

Predate. Does not mean “to eat”. Use depredate instead.

Pronouns. Avoid the use of pronouns such as “this,” as the referent may not be clear.

Punctuation. Capitalize the first letter after a colon if what follows is a sentence. Use the serial or Oxford comma in a series of elements (e.g., black, green, and white).

Quotations. Use quote marks, and include page numbers in the citation if available. For longer quotes: block style, one-line space above and below, indented both sides, italics, no quotation marks. For other kinds of block material, roman, indented both sides (or centered, depending on the type of information). Both types of blocked-out material get a line space above and a line space below.

radio-tagged. (not radiotagged, radiomarked, radio-marked). radio-tag (verb and noun).

RESULTS section. The Results section should include only results pertinent to the hypotheses or questions raised in the Introduction section and treated in the Discussion section. Use the same number of decimal places for means and SE or SD (e.g., 38.9 ± 1.2 , not 38.9 ± 1.23); usually only one or two decimal places are necessary. Round percentages to whole numbers. The text should not duplicate material presented in tables or figures. The text should make clear the relevant sample sizes, degrees of freedom, values of statistical tests, and *P*-values. Test statistics should be rounded to one (t-test, *C*₂, *F*, etc.) or two (*r*, *r*², etc.) decimal places. If reporting the results of analyses using the information-theoretic method, describe and justify the a priori hypotheses and models in the candidate set, identify exploratory hypotheses, and state the criterion used to evaluate models, e.g., second-order AIC corrected for small sample sizes (AIC_c), AIC_c differences (Δ_i or ΔAIC_c), and Akaike weights (*w_i*). Define terms for information-theoretic analyses (*K*, Dev, ΔAIC , etc.) on first use in the text and in table captions. When reporting the results of AIC analyses, please follow: Anderson et al. (2001). Suggestions for presenting the results of data analyses. *Journal of Wildlife Management* 65:373–378.

Running head. On the title page, include a shortened title of 8 words or fewer.

Software names. No need to use the word “version or” v.” Use PAUP* 4.0

SORA. Searchable Ornithological Research Archive.

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Spelling. Use American English spelling throughout, except for foreign titles in the Literature Cited section.

Statistical Details.

- **Statistical tests.** Authors are encouraged to use the best statistical tools for data analysis, and it is acceptable to present results from frequentist, information-theory, and Bayesian approaches in the same manuscript. Describe procedures used to evaluate fit of the model to the data, such as goodness-of-fit tests, inspection of residuals, or tests of model assumptions. For results of statistical tests, report the statistical test that was applied (2-sample t-test, analysis of covariance), the test statistic (t , U , F , r), degrees of freedom following the test statistic (i.e. $df = 2$ and 120), and the probability value (P). Indicate whether statistical tests were one- or two-tailed, and the α -level that was used to determine significance ($P < 0.05$). Give effect sizes with 95% confidence or credible intervals when appropriate.
- **Power analyses.** Avoid post-hoc power analyses. Non-significant statistical tests will always have low power based on the effect size observed in your results. However, failing to reject a statistical null hypothesis is not the same as demonstrating the lack of a biologically relevant effect. Small sample sizes can lead to a statistical test having a low probability of detecting a real effect (i.e. low statistical power). Readers will want to know if your inference of no statistically significant difference between treatments is biologically relevant, rather than an artifact of low sample sizes and hence low statistical power. Next steps to consider:
 1. Determine how to measure the size of the effect of your treatment on the biological phenomenon that you are studying (the “effect size”). Then consider what effect size would be biologically meaningful. Identifying a biologically relevant effect size is challenging. In all likelihood, no paper has examined your focal set of traits or measurements for the same species. Studies of the same phenomenon in other species may be available as an alternative source of information about biologically relevant effect sizes.
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 3. If prior knowledge about a biologically relevant effect size is unavailable, interpreting standardized effect sizes might be more reasonable. See: Nakagawa, S., and I. C. Cuthill (2007). Effect size, confidence interval and statistical significance: a practical guide for biologists. *Biological Reviews* 82:591–605.
- **Demographic parameters.** Define these parameters at first mention and notation follows precedents and common usage in the literature: N for abundance, ϕ for apparent survival (not φ or Φ), S for true survival, F for site fidelity, ψ for movement rates, λ for the finite rate of population change, and p and c for the probabilities of detection (not P or ρ [rho]). For results of model selection, report the parameter count, the deviance, the statistics used to select candidate models, and model weights (k , Dev or $-2\ln L$, $\Delta QAIC_c$, w_i). The minimum

QAIC_c value and variance inflation factors (\hat{c}) can be reported in footnotes in the Table. In long Tables with many candidate models, models with negligible support can be discarded ($w_i < 0.01$) unless the model is important to the analysis (global starting model).

- **Fonts for statistical metrics.** Report the following metrics in italics: n for sample size, P for probability values, G as the test statistic from a G -test, t_a for the test statistic from paired or two sample t -test with a degrees of freedom, U from a Mann-Whitney U -test, $F_{a,b}$ as the test statistic from an F -ratio with a, b = numerator and denominator degrees of freedom (degrees of freedom are not italicized), r and r_s for Pearson and Spearman correlation coefficients, r^2 for the coefficient of determination, and k and w_i for the number of parameters and Akaike weights. Report the following statistical information in normal font, not italics: SD for standard deviation, SE for standard error, CI for confidence interval, CV for coefficient of variation, df for degrees of freedom, ns for nonsignificant, Dev for model deviance, BIC for Bayesian Information Criterion χ^2 for chi-square statistics, and ANOVA for analysis of variance. Use AIC_c and QAIC_c for (quasi) Akaike's Information Criterion. All variables are italicized unless they are denoted by a Greek letter, in which case they are not italicized.
- **Italics.** n (sample size), P (probability rounded to two decimal places unless $P < 0.01$, in which case round to three decimal places; use $P < 0.001$ as the smallest P -value; U (Mann-Whitney U -test), r (simple correlation coefficient; Pearson r); z (Wilcoxon test), r_s (Spearman rank-order correlation), R (multiple regression coefficient), G (G -test), F -test, k (number of parameters in AIC analyses).
- **Roman.** SD (standard deviation), SE (standard error), χ^2 (chi-square), CV (coefficient of variation), df (degrees of freedom), AIC_c. Note that all variables are italicized unless they are denoted by a Greek letter, which is set in roman. If a variable is denoted by a combination of letters (usually an abbreviation), these too should be set in roman.
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Symbols. When the less than (<) or greater than (>) symbol is used in a sentence it does not require a space around it (i.e. there were <10 birds feeding).

Tables. Cite tables within the text in numerical order. Use Arabic numbers, e.g., Table 1. Table title is in sentence case (only the first word of the title starts with a capital letter). Table headings also are sentence case. Tables should be in Word format and in the Table format in Word; do not use tabs to create columns. Table citations in parentheses should be separated from literature citations with a

semicolon but can appear together with figure citations: (Jones and Johnson 1978; Table 1 and Figure 1). Keep tables as simple as possible. Orient tables vertically whenever possible. They should be intelligible without reference to the manuscript text. Do not restate results given in the text. Do not use solid vertical or horizontal lines in tables. Do not include extensive raw tabular material either as tables or appendices: Either upload as Supplemental Material or cite your website. If birds are listed in several tables within the manuscript, scientific names should be given only in one table, the one with the comprehensive species list. The only exception to the phylogenetic order of species is if another logical order of species is used, for example one based on Results.

How to format a table:

- Create all tables using the Table format in Word under the *Insert* pull-down menu.
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SEE SAMPLE TABLE IN SAMPLE ARTICLE FORMAT BELOW.

Taxonomy. For any new taxonomy, see Nomenclature. Give the scientific name in parentheses (and in italics) at the first mention of a species both in the Abstract and in the article. Latin species names are always in italics: in the text, in figures and tables, and in the Literature Cited section. Scientific and American English names of birds, and their order of presentation in the manuscript, including figures and tables, should follow:

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Outside the Americas: Avibase Clements Checklist <http://avibase.bsc-eoc.org/checklist.jsp?lang=EN> or Clements Checklist <http://www.birds.cornell.edu/clementschecklist/download/>

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- 2) Three *Catharus* species migrate through northern Colombia...
- 3) Because *Catharus* are expected to depart shortly after sunset...
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U.S. or USA or United States or United States of America. No US. UK is okay.

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vs. vs. not versus.

Website. One word, website.

SAMPLE ARTICLE FORMAT (use double-spacing in your submission)

Red-eyed Vireo migration

RESEARCH ARTICLE

Prolonged spring migration in the Red-eyed Vireo (*Vireo olivaceus*)

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[†] This author is deceased.

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[if 2 corresponding authors, list name, email address; name, email address:

* Corresponding authors: Paul Callo, pcallo@mbc.edu; Eugene Morton, mortone@si.edu]

ABSTRACT

We used archival geolocators to track the migration of Red-eyed Vireos (*Vireo olivaceus*), abundant forest songbirds with significantly increasing breeding-population trends, to identify important stopover and wintering regions. All individuals from a single breeding site ($n = ..$

Keywords: frugivory, geolocators, geologgers, migration, Red-eyed Vireo, stopovers, *Vireo olivaceus*

Migración Prolongada de Primavera en *Vireo olivaceus*

RESUMEN

Usamos geolocalizadores para rastrear la migración de *Vireo olivaceus*, un ave canora de bosque abundante con tendencias a incrementar su población reproductiva, para identificar regiones importantes de parada e invernada. Todos los individuos de un único sitio de reproducción ($n = ...$

Palabras clave:

(non-English abstract in Spanish, French, or Portuguese will be provided by the Publisher. Any other language should be provided by the author)

INTRODUCTION [first level heading]

Widespread and long-term effects on populations of songbirds that migrate to the tropics for the northern winter are driven by both breeding-ground productivity and mortality during migration and the nonbreeding season (Terbrough 1980, Sherry and Holmes 1995, Faaborg et al. 2010). Data on the timing of migration, routes taken, stopover locations and durations, and overwintering locations are needed to permit an informed assessment of conservation

METHODS [first level heading]

We used data from light-level geolocators (Mk20S, 0.6 g; British Antarctic Survey [BAS]) deployed on male Red-eyed Vireos ($n = 26$) between June 3 and June 17, 2011, and retrieved between 26 May and 9 June 2012 ($n = 10$) at the 150-ha Hemlock Hill Field Station in northwestern Pennsylvania (41.8°N, 79.9°W). The site is covered by mature mixed-deciduous forest with scattered Eastern Hemlocks (*Tsuga canadensis*).

RESULTS [first level heading]

Wintering Locations and Migration Routes [second level heading]

All Red-eyed Vireos from the Hemlock Hill breeding population wintered in a similar region in northwestern South America that represented an area of ~15% of the total winter range (Table 1 and Figure 1). Average distance between individuals (all pairwise comparisons, $n = 45$) was 712 ± 300 km (mean \pm SD), and average nearest-neighbor distance was 286 ± 142 km ($n = 10$). Most individuals (8 of 10) occupied a single wintering region, but two individuals (Figure 2E) first occupied a winter site from late October to the beginning of December before moving ~40 km westward to their final wintering region, where they stayed for 4 months. The spring migration route was similar among all 10 individuals as birds migrated through Central America to the Yucatan Peninsula (Figure 2).

Stopovers and rate of migration. [third level heading] Spring migration, from start to finish, averaged 46 days (range: 39–52 days), and with stopovers, migration rate averaged 146 km day^{-1} (Table 2). However, most of the spring migration consisted of stopover days, and individuals covered the journey of ~6,600 km in only 13 days of flight. Migration rate and stopover duration varied greatly among different stages of the journey (Table 2 and Figure 2). Red-eyed vireos had prolonged stopovers in Colombia (18.6 ± 4.9 days [all durations reported as means \pm SD]; range: 12–27).

All birds remained at the breeding site throughout August, but the onset of fall migration in September was unknown because birds could have moved south with no change in longitude compared with the breeding site. Average arrival date at the wintering site was October 22 (range: October 14 to November 4).

DISCUSSION

Red-eyed Vireos from this population all overwintered in northwestern South America (Figure 1) in either the Amazon or Orinoco River basins. These river basins are perhaps the most pristine region in South America, with >90% forest cover (Fraser et al. 2012). Two of the 10 Red-eyed Vireos (Figure 2E,F) changed locations during the winter season, both to the southwest of their initial site, but over relatively short distances (400 km). Intratropical migration has ...

ACKNOWLEDGMENTS

We thank L. Welch and J. Silverton for assistance with field work and E. Jones for statistical assistance. We also thank O. Love.

Funding statement: [Required.] [include grant numbers]. A list of funders, a statement about whether any funders had input into the content of the manuscript, and a statement about whether any funders required their approval of the manuscript before submission or publication.

Ethics statement: [Required.] List of protocols used, license numbers, etc. For example: Ethics statement: This research was conducted in compliance with the Guidelines to the Use of Wild Birds in Research.

Author contributions: [Required.] G.R.H. formulated the questions; R.A.K. and G.R.H. collected data and supervised research; B.W.A. analyzed the data; and G.R.H. wrote the paper. [this sample is from a different paper]

Data availability: [Required.] Our data is deposited with Dryad at [url].

LITERATURE CITED

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APPENDIX

The Appendix may contain text and/or tables. If there is more than one Appendix, then label them Appendix A, Appendix B, etc. Tables within appendices continue the table numbering from the earlier sections of the paper, e.g., “Appendix A Table 5.” Same for figures. For instance, the first figure in Appendix A may be Figure 5, and it would be cited as “Appendix A Figure 5.” Supplemental Tables and Figures should be named Supplemental Material Table S1 and Supplemental Material Figure S1, but only use Supplemental Material files for material that is too large to fit on one or two journal pages or for content that is truly supplemental such as analytics, computer code, etc., or simply would be too large for a page in the journal, and for datasets and audio and video files).

Figure Captions

Figure 2. Estimated migration routes, timing, and destination for individual male Red-eyed Vireos ($n = 9$) (A–I) tracked with geolocators from the Hemlock Hill, Pennsylvania, breeding population, 2011 to 2012. Dashed lines indicate periods where locations are uncertain because of equinox periods or low-confidence sunrise-sunset transitions. The individual maps are arranged according to time of departure from South America from earliest (A) to latest (I)...

Table 1. Wintering locations in South America of Red-eyed Vireos ($n = 10$) migrating from northwestern Pennsylvania. Values are means (with SD in parentheses), and n is the number of days used to estimate location. Letters correspond to maps in Figure 2.

Bird	Latitude	Longitude	n
A	1.39°N (2.90)	64.15°W (0.98)	150
B	0.56°N (2.05)	64.15°W (0.98)	147
C	3.54°S 92.99)	69.00°W (1.11)	157
D	3.80°S (2.56)	65.2°W (0.70)	151
E ^a	1.52°N (2.61)	59.15°W (0.66)	38
	1.08°N (2.30)	62.42°W (0.63)	119
F	0.55°S (3.13)	69.93°W (0.94)	166
G	3.27°N (2.12)	62.87°W (0.91)	148
H	7.24°N (2.24)	64.38°W (0.71)	160

I ^a	0.64°S (2.45)	60.62°W (0.83)	35
	3.01°S (1.80)	63.33°W (0.73)	110
J ^b	1.81°N (1.73)	63.70°W (0.52)	157

^a Individual changed locations during seasons; listed in chronological order.

^b Not depicted in Figure 2.
