Instructions to Authors

The JOURNAL OF THE ARKANSAS ACADEMY OF SCIENCE is published annually.

A. General Policies

In order for a manuscript to be considered for publication in journal, it is the policy of the Arkansas Academy of Science that:

1) at least one of the authors of a paper submitted for publication in the JOURNAL must be a member of Arkansas Academy of Science,
2) only papers presented at the annual meeting are eligible for publication,
3) manuscript submission is due at the annual meeting.

B. General Requirements

The JOURNAL OF THE ARKANSAS ACADEMY OF SCIENCE is published annually. Original manuscripts should be submitted either as a feature article or a shorter general note. Original manuscripts should contain results of original research, embody sound principles of scientific investigation, and present data in a concise yet clear manner. Submitted manuscripts should not be previously published and not under consideration for publication elsewhere. The JOURNAL is willing to consider review articles. These should be authoritative descriptions of any subject within the scope of the Academy. Authors of articles and reviews must refrain from inclusion of previous text and figures from previous reviews or manuscripts that may constitute a breach in copyright of the source journal. Reviews should include enough information from more up-to-date references to show advancement of the subject, relative to previously published reviews. During submission, Corresponding authors should identify into which classification their manuscript will fall.

For scientific style and format, the CBE Manual for Authors, Editors, and Publishers Sixth Edition, published by the Style Manual Committee, Council of Biology Editors, is a convenient and widely consulted guide for scientific writers and will be the authority for most style, format, and grammar decisions. Special attention should be given to grammar, consistency in tense, unambiguous reference of pronouns, and logically placed modifiers. To avoid potential rejection during editorial review, all prospective authors are strongly encouraged to submit their manuscripts to other qualified persons for a friendly review of clarity, brevity, grammar, and typographical errors before submitting the manuscript to the JOURNAL. Authors should rigorously check their manuscript to avoid accidental plagiarism, and text recycling. Authors should declare any and all relevant conflicts of interest on their manuscripts.

To expedite review, authors should provide the names and current e-mail address of at least three reviewers within their field, with whom they have not had a collaboration in the past 2 years. The authors may wish to provide a list of potential reviewers to be avoided due to conflicts of interest.

C: Review Procedure

Evaluation of a paper submitted to the JOURNAL begins with critical reading by the Managing Editor. The manuscript is then submitted to referees for critical review for scientific content, originality and clarity of presentation. To expedite review, authors should provide, in a cover letter, the names and current e-mail address of at least three reviewers within the appropriate field, with whom they have not had a collaboration in the past two years. Potential reviewers that the authors wish to avoid due to other conflicts of interest can also be provided. Attention to the preceding paragraphs will also facilitate the review process. Reviews will be returned to the author together with a judgement regarding the acceptability of the manuscript for publication in the JOURNAL. The authors will be requested to revise the manuscript where necessary. Time limits for submission of the manuscript and publication charges will be finalized in the accompanying letter from the Managing Editor (see “Proposed timetable for manuscript processing”). The authors will then be asked to return the revised manuscript, together with a cover letter detailing their responses to the reviewers’ comments and changes made as a result. The corresponding author will be responsible for submitting the total publication cost of the paper to the Treasurer of the Academy, when the revised manuscript is returned to the Editor assigned to your manuscript. Failure to pay the publication charges in a timely manner will prevent processing of the manuscript. If the time limits are not met, the paper...
will be considered withdrawn by the author. Please note that this revised manuscript will be the manuscript that will enter into the bound journal. Thus, authors should carefully read for errors and omissions so ensure accurate publication. A page charge will be billed to the author of printed errata; however, no charge is made for errata that are only “printed” in the on-line journal (contact the Editor-in-Chief for more details). All final decisions concerning acceptance or rejection of a manuscript are made by the Managing Editor and/or the Editor-in-Chief.

Please note that all manuscript processing, review and correspondence will be carried out electronically via the JOURNAL web site at https://scholarworks.uark.edu/jaas/, and the authors are able to monitor progress on their manuscript as their article is moved to final publication. Thus, authors are requested to add the e-mail addresses of the editors (jarksci@gmail.com) to their accepted senders’ list to ensure that they receive all correspondence.

Reprint orders should be placed with the printer, not the Managing Editor. Information will be supplied nearer publication of the JOURNAL issue. Authors are able to download a finished electronic copy of their manuscript from the JOURNAL website.

D: Policies to Maintain Quality of the Peer Review Process, Academic Honesty and Integrity

The JOURNAL adheres to the highest standards of academic honesty and integrity. Authors of articles and reviews must refrain from inclusion of previous text and figures from previous reviews or manuscripts that may constitute a breach in copyright of the source Journal. Authors of reviews should include enough information from more up-to-date references to show advancement of the subject, relative to previously published reviews. Authors should check their manuscript rigorously to avoid accidental plagiarism, and text recycling. Authors should declare any and all relevant conflicts of interest on their manuscripts.

The JOURNAL maintains a strict peer review policy with reviewers from relevant fields drawn from around the world to produce a high quality scientific publication. Evaluation of a paper submitted to the JOURNAL begins with critical reading by the Managing Editor. The manuscript is then submitted to referees for critical review for scientific content, originality and clarity of presentation. Editors and reviewers are expected to declare all potential conflicts of interest that may affect handling of submitted manuscripts. To expedite review, authors should provide the names and current e-mail address of at least three reviewers within their field, with whom they have not had a collaboration in the past two years. Authors may wish to provide a list of potential reviewers, or editorial staff to be avoided due to conflicts of interest.

Allegations of misconduct will be pursued according to COPE’s guidelines (available at http://publicationethics.org/resources/guidelines).

Neither the JOURNAL editorial board, the University of Arkansas nor bepress.com accepts responsibility for the opinions or viewpoints expressed, or for the correctness of facts and figures.

E: Copyright, Licensing and Use Policy

The Journal of the Arkansas Academy of Science is an Open Access Journal. The University of Arkansas Libraries have partnered with the Academy to archive and make volumes of the JOURNAL and Proceedings freely available worldwide online at http://scholarworks.uark.edu/jaas/ repository (indexed in the Directory of Open Access Repositories).

All articles published in the JOURNAL are available for use under the following Creative Commons license: Attribution-NoDerivatives 4.0 International (CC BY-ND 4.0) (https://creativecommons.org/licenses/by-nd/4.0/).

Thus, users are able read, download, copy, print, distribute, search, or link to the full texts of these articles, or use them for any other lawful purpose, without asking prior permission from the publisher or the author. Authors retain copyright over their material published in the JOURNAL, however appropriate citation of the original article(s) should be given. Authors may archive a copy of the final version of their articles published in the JOURNAL in their institution’s repository.

F: Proposed Timetable for Manuscript Processing

It is the policy of the Arkansas Academy of Science that 1) at least one of the authors of a paper submitted for publication in the JOURNAL must be a member of Arkansas Academy of Science, 2) only papers presented at the annual meeting are eligible for publication, and 3) manuscript submission is due at the annual meeting. Thus, manuscripts should be
submitted to the JOURNAL website: https://scholarworks.uark.edu/jaas/, two days before the meeting. Authors who have submitted manuscripts via the system previously, should use the contact/email and password that was used previously. New authors should follow instructions on the site to establish their profile. Authors can subsequently update their profile with any changes to their contact and account information as necessary.

After the meeting all correspondence regarding response to reviews etc. should be directed to the Managing Editor. Publication charges ($50 per page) are payable by check (we are unable to accept PO numbers or credit cards) when the corresponding author returns their response to the reviewers’ comments. Publication charges, made payable to the Arkansas Academy of Science, must be sent to Andrew T. Sustich, Ph.D. Treasurer, Arkansas Academy of Science, PO Box 419, State University, AR 72467-0419. Please note that the corresponding author will be responsible for the total publication cost of the paper and will submit one check for the entire remittance by the set deadline. If page charges are not received by the deadline, publication of the manuscript will occur in the following year’s JOURNAL volume (i.e. two years after the meeting at which the data was presented!) The check must contain the manuscript number (assigned at time of submission). All manuscript processing, review and correspondence will be carried out electronically. Thus, authors are requested to add the editors’ e-mail addresses to their accepted senders’ list to ensure that they receive all correspondence.

Timetable
Please note: All manuscripts must be properly formatted PRIOR to submission as a MS Word document.

All manuscripts must be submitted a minimum of 2 days prior to the annual meeting electronically via: https://scholarworks.uark.edu/jaas/, the JOURNAL website. The entire review and publication procedure will be handled via the server. Authors who have submitted manuscripts via the system previously, should use the contact/email and password that was used previously. New authors should follow instructions on the site to establish their profile. Authors can subsequently update their profile with any changes to their contact and account information as necessary. Should you have any problems, please contact the Managing Editor (jarksci@gmail.com).

End of April: Initial editorial review. Associate Editors are assigned.
End of May: Manuscripts sent to reviewers.
End of July: All reviews received. Editorial decisions made on reviewed manuscripts. Manuscripts returned to authors for response to reviewers’ critiques. For accepted manuscripts, additional details and due dates for manuscript return will be given in the acceptance letter. Please email the Managing Editor if you fail to receive your review by the 31st July.
End of August: Authors return revised manuscripts as a MS Word document to the JOURNAL website, as per due dates in the acceptance letter, typically 28 days after editorial decision/reviewers, critiques were sent. Corresponding author submits publication charges to Andrew T. Sustich, Ph.D. Treasurer, Arkansas Academy of Science, PO Box 419, State University, AR 72467-0419. The Managing Editor will send an email reminder approximately 1 week prior to the final due date.

The prompt return of revised manuscripts as a MS Word document and payment of publication costs is critical for processing of the JOURNAL by the JOURNAL staff. If the corresponding author will be unable to attend to the manuscript within the framework of this schedule, then it is the responsibility of the corresponding author to make arrangements with a coauthor to handle the manuscript. NB. The corresponding author will be responsible for submitting the total publication cost of the paper by August 31st. FAILURE TO PAY the publication charges by the deadline will prevent processing of the manuscript, and the manuscript will be added to the manuscripts received from the following year's meeting.

PREPARATION OF THE MANUSCRIPT

A. General considerations
Format the manuscript as a published paper. If you are unfamiliar with the JOURNAL, please access last year's journal at http://scholarworks.uark.edu/jaas/ to familiarize yourself with the layout. Formatting of page size and margins for every page should be carefully checked at each stage of submission as this will impact number of pages that the manuscript occupies. Incorrect formatting will affect the turn-around time of the article and may incur extra page charges to be added.
1. Use Microsoft Word 2007 or higher for preparation of the document and the file should be saved and uploaded as a Word Document.

2. The text should be single spaced with Top and Bottom margins set at 0.9", Left and Right margins 0.6". Except for the Title section, the manuscript must be submitted in two column format and the distance between columns should be 0.5". This can be performed in MS Word by clicking on “Layout” on the Toolbar and then “Columns” from the drop-down menu. Then select "two" (columns).

3. Indent paragraphs and subheadings 0.25".

4. Use 11 point font in Times New Roman for text. Fonts for the rest of the manuscript must be
   a) Title: 14 point, bold, centered, followed by a single 12 point blank line.
   b) Authors’ names: 12 point, normal, centered.
      Single line spaced. Separate last author line from authors' address by a single 10 point blank line.
   c) Authors’ addresses: 10 point, italic, centered.
      Single line spaced. Separate last author line from corresponding author's email by a single 10 point blank line.
   d) Corresponding author’s email: 10 point, normal, left alignment. Please note that all authors (including email addresses) must be included in the electronic submission form, but only the corresponding author’s email is to be included in the uploaded manuscript file.
   e) Running title: 10 point, normal, left alignment.
      The Running Title must be the same as the Short Title entered into the electronic submission system.
   f) Main text: 11 point, justified left and right.
   g) Figure captions: 9 point, normal.
   h) Table captions: 11 point normal.
   i) Section headings: 11 point, bold, flush left on a separate line, then insert an 11 point line space.
      Section headings are not numbered.
   j) Subheadings: 11 point, bold, italic and flush left on a separate line.

5. Set words in italics that are to be printed in italics (e.g., scientific names).

6. In scientific text, Arabic numerals should be used in preference to words when the number designates anything that can be counted or measured: 3 hypotheses, 7 samples, 20 milligrams. However, numerals are not used to begin a sentence; spell out the number, reword the sentence, or join it to a previous sentence. Also, 2 numeric expressions should not be placed next to each other in a sentence. The pronoun “one” is always spelled out.

7. Use of footnotes is not permitted

8. A feature article is 2 or more pages in length. Most feature articles should include the following sections: Abstract, Introduction, Materials and Methods, Results, Discussion, Conclusions, Acknowledgments, and Literature Cited.

9. A general note is generally shorter, usually 1 to 2 pages and rarely utilizes subheadings. A note should have the title at the top of the first page with the body of the paper following. Abstracts are not used for general notes.

10. A review article should contain a short abstract followed by the body of the paper. The article may be divided into sections if appropriate, and a final summary or concluding paragraph should be included.

11. Digital Object Identifiers (DOIs): The Journal repository staff (at UARK) will assign DOIs via CrossRef to published JAAS manuscripts. Authors will see a DOI addition box in the submission page. This box is for repository staff use only.

Title of a Paper (14 point, bold, centered)

A.E. Firstauthor¹*, B.F. Second¹, C.G. Third², and D.H. Lastauthor¹ (12 point font, normal, centered)

¹Department of Biology, Henderson State University, Arkadelphia, AR 71999
²Arkansas Game and Fish Commission, 915 E. Sevier Street, Benton, AR 72015 (10 point font, italic, centered)

*Correspondence: Email address of the corresponding author (10 point, normal, left alignment)

Running title: (must be the same as the Short Title entered into the electronic submission system) (no more than 65 characters and spaces) (10 point, normal, left alignment)

Figure 1. Layout of the title section for a submitted manuscript.
B. Specific considerations

1. Title section
   (see Fig. 1 above for layout).
   i. It is important that the title be short, but informative. If specialized acronyms or abbreviations are used, the name/term should be first indicated in full followed by the short form/acronym.
   ii. Names of all authors and their complete mailing addresses should be added under the Title. Authors names should be in the form "A.M. Scientist", e.g. I.H. Still. Indicate which author is the corresponding author by an asterisk, and then indicate that author’s email address on a separate line (see A.4 for format.)
   iii. Please include a Short Informative Running title (not to exceed 65 characters and spaces) that the Managing editor can insert in the header of each odd numbered page. This Running Title MUST be the same as the Short Title the author entered into the electronic submission system.
   iv. Insert a single 10 point blank line after the "Running Title" and add a Continuous section break. DO NOT INSERT A PAGE BREAK.

2. Abstract
   An abstract summarizing in concrete terms the methods, findings, and implications discussed in the body of the paper must accompany a feature article (or a review article). That abstract should be completely self-explanatory. A short summary abstract should also be included for any review article. When submitting a General Note via the electronic submission system, an abstract should be inserted into the appropriate part of the submission form. This facilitates the review process, and visibility of the published General Note on the web. However, an abstract is not required in the body of the actual manuscript. Please review your title and abstract carefully to make sure they convey your essential points succinctly and clearly.

3. Introduction
   An appropriately sized introduction should be included that succinctly sets the background and objectives of the research.

4. Materials and Methods
   Sufficient details should be included for readers to repeat the experiment. Where possible reference any standard methods, or methods that have been used in previously published papers. Where kits have been used, methods are not required: include the manufacturer's name and location in brackets e.g. "RNA was prepared using the RNeasy Plus Micro Kit (Qiagen, USA)."

5. Tables and figures (line drawings, graphs, or black and white photographs) should not repeat data contained in the text. Tables, figures, graphs, pictures, etc., have to be inserted into the manuscript with "text wrapping" set as "top and bottom". Figures, tables, graphs and pictures can occupy one column (3.4" wide) or a maximum of two columns wide (7.3"). In the event that a table, a figure, or a photograph requires larger space than a single column, the two column format should be ended with a “Continuous Section Break” and the Table/figure should be placed immediately afterward. The two column format should continue immediately after the Table/figure. To save space, where possible place Tables/Figures at the top or bottom of the column/page.
   Tables and figures must be numbered, and should have titles and legends containing sufficient detail to make them easily understood. Allow two 9 point line spaces above and below figures/tables. Please note that Figure and Table captions should be placed in the body of the manuscript text AND NOT in a text box.
   i. Tables: A short caption in 11 point normal should be included. Insert a solid 1.5 point line below the caption and at the bottom of the table. Within tables place a 0.75 point line under table headings or other divisions. Should the table continue to another page, do not place a line at the bottom of the table. On the next page, place the heading again with a 0.75 point line below, then a 1.5 point line at the bottom of the table on the continued page. Tables can be inserted as Tables from Excel, but should not be inserted as pictures from PowerPoint, Photoshop etc., or from a specialized program, as the Editorial Board cannot guarantee maintaining the quality of the print in those other formats.
   ii. Figures: A short caption should be written under each figure in 9 point, normal. Figure 2 shows an example for the format of a figure inserted into the manuscript. All figures should be created with applications that are capable of preparing high-resolution PhotoShop compatible files. The figure
should be appropriately sized and cropped to fit into either one or two columns. Figures should be inserted as JPEG, TIFF images or PhotoShop compatible files. Arrows, scale bars etc., must be integral to the figure: i.e. not “added over” the figure once place in the word document: “independent arrows, etc., will be lost in manuscript formatting. While the JOURNAL is printed in black and white, we encourage the inclusion of color figures and photographs that can be viewed in the online version. Please note that the figures directly imported from PowerPoint frequently show poor color, font and resolution issues. Figures generated in PowerPoint should be converted to a high resolution TIFF or JPEG file (see your software user's manual for details). If a figure/table is taken from a powerpoint slide, the figure title/legend from that slide should be removed: the only title and legend that should be associated with the figure should be the caption as described at the start of this section, and as shown in the example Figure 2.

6. Chemical and mathematical usage
   i. The Journal requires the use of the International System of Units (SI). The metric system of measurements and mass must be employed. Grams and Kilograms are units of mass not weight. Non-SI measurements may be included, secondarily, in parentheses.
   ii. Numerical data should be reported with the number of significant figures that reflects the magnitude of experimental uncertainty.
   iii. Chemical equations, structural formulas and mathematical equations should be placed between successive lines of text. Equation numbers must be in parentheses and placed flush with right-hand margin of the column.

7. Biological Specimens
   i. Common names
      Due to the variability in use of English common names, the common name should be appended with the scientific name at first mention. Use full common names in the abstract. Authors should then be consistent with the use of common names of organisms in their manuscripts.
   ii. Deposition of materials and sequences in publicly available domains
      Cataloguing and deposition of biological specimens into collections is expected. Publication of manuscripts will be contingent on a declaration that database accession numbers and/or voucher specimens will be made available to interested researchers. Where possible, collector and voucher number for each specimen should be stated in the Results section. The location of the collection should be stated in the Methods section. This will facilitate easy access should another researcher wish to obtain and examine the specimen in question. Novel nucleotide sequence data must be submitted to GenBank, and accession numbers presented within the manuscript. Sequence data may also be attached as Supplementary data in the electronic submission to the JOURNAL.

8. Literature Cited
   All cited literature must be included in the Literature Cited section at the end of the manuscript and formatted as given below. No reference should be placed in the manuscript as a footnote.
   i. Authors should use the Name – Year format as illustrated in The CBE Manual for Authors, Editors, and Publishers and as shown below. The JOURNAL will deviate from the form given in the CBE Manual only in regard to placement of authors’ initials and abbreviation of journal titles. Initials for second and following authors will continue to be placed before the author’s surname. Note that authors’ names are in bold, single spacing occurs after periods. If a citation has 9 authors or more, write out the first 7 and append with et al. in the Literature Cited section. Journal titles should be written in full. Formats for a
journal article and a book are shown below along with examples. In order for the Journal to use CrossRef for assigning DOIs to JAAS manuscripts, authors of manuscripts must include DOIs for articles that they cite in the Literature Cited sections of the manuscript.

ii. Please note how the literature is “cited in text as”, i.e. in the introduction, results etc. In general, cite in text by "first author et al." followed by publication date. **DO NOT USE NUMBERS, etc.** Also note that in the Literature Cited section, references should be single line spaced, justified with second and following lines indented 0.25". If in doubt, see previous issue for format.

Accuracy in referencing current literature is paramount. Authors are encouraged to use a reference databasing system such as Reference Manager or Endnote to enhance accurate citation. Do not cite abstracts and oral, unpublished presentations. Unnecessary referencing of the authors own work is discouraged; where possible the most recent reference should be quoted and appended with “and references therein”.

**General form:**

**Author(s).** Year. Article Title. Journal title volume number(issue number):inclusive pages.

**Author(s) [or editor(s)].** Year. Title of Book. Publisher name (Place of publication). Number of pages.

Please note below, that we have included “cited in text as” to show you the form of citation in the text, only, i.e. the “cited in text” part is not placed in the Literature cited section.

**Specific examples:**

**Standard Journal Article**


Cited in text as: (Davis 1993)


Cited in text as: (Lauffart et al. 2002)


Cited in text as: (Zheng and Luh 1989)

**In press articles**

**Author(s).** Expected publication Year. Article Title. Journal title in press.

Cited in text as: (First author et al. in press)


Cited in text as: (Kulawiec et al. in press)

**Books, Pamphlets, and Brochures**


Cited in text as: (Box et al. 1978)


Cited in text as: (Gilman et al. 1990)


Cited in text as: (Engelberger 1989)

**Book Chapter or Other Part with Separate Title but Same Author(s)** – General format is given first.

**Author(s) or editor(s).** Year. Title of book. Publisher’s name (Place of publication). Kind of part and its numeration, title of part; pages of part.


Cited in text as: (Hebel and Stromberg 1987)


Cited in text as: (Singleton and Bennett 1997)
**Book Chapter or Other Part with Different Authors** – General format is given first.

**Author(s) of the part.** Year. Title of the part. *In:* author(s) or editor(s) of the book. Title of the book. Publisher (Place of publication). Pages of the part.


**Dissertations and Theses** – General format is given first.

**Author.** Date of degree. Title [type of publication – dissertation or thesis]. Place of institution: name of institution granting the degree. Total number of pages. Availability statement.

The availability statement includes information about where the document can be found or borrowed if the source is not the institution’s own library.


**Published Conference Proceedings** – General format is given first.

**Author(s)/Editor(s).** Date of publication. Title. Type of publication or conference. Name of conference (if not given in the 2nd element); inclusive dates of the conference; place of the conference. Place of publication: publisher. Total number of pages.


**Scientific and Technical Reports** – General format is given first.

**Author(s) (Performing organization).** Date of publication. Title. Type report and dates of work. Place of publication: publisher or sponsoring organization. Report number. Contract number. Total number of pages. Availability statement if different from publisher or sponsoring organization. (Availability statement may be an internet address for government documents.)


**Electronic Journal Articles and Electronic Books** should be cited as standard journal articles and books except add an availability statement and date of accession following the page(s):


**Online resources**

Citation depends on the requirement of the particular website. Otherwise use the “electronic journal article” format.


Cited in text as: (USGS 1979)

**Multiple Citations are Cited in text as:**

(Harris and Gordon 1988; Steiner *et al.* 1992; Johnson 2006).

**9. Submission of Obituaries and In Memoria**

The Executive Committee and the Journal of the Arkansas Academy of Science welcome the opportunity to pay appropriate professional honor to our departed Academy colleagues who have a significant history of service and support for the Academy and Journal. The editorial staff will consider obituaries for former executive committee members to be included in the Journal. Additional
obituaries not meeting these criteria will be forwarded to be posted on the Academy website. We would request that paid up members of the Academy that wish to write an obituary provide a one to two page professional description of the scientist’s life that should include details of his/her contribution to the Academy and publication record. The format should follow the two column format and 11pt Times New Roman font. A color or black-and-white photograph to fit in one column should also be provided.

BUSINESS & SUBSCRIPTION INFORMATION

Remittances and orders for subscriptions and for single copies and changes of address should be sent to the Secretary of the Academy: Dr. Stephen Addison, Professor of Physics, Dean, College of Natural Sciences and Mathematics, University of Central Arkansas, Conway, AR 72035 (email: saddison@uca.edu).

Members may receive 1 copy with their regular membership of $30.00, sustaining membership of $35.00, sponsoring membership of $45.00 or life membership of $500.00. Life membership can be paid in four installments of $125. Institutional members and industrial members receive 2 copies with their membership of $100.00. Library subscription rates from 2009 are $50.00. Copies of most back issues are available. The Secretary should be contacted for prices.