

# INSTRUCTIONS TO BULLETIN AUTHORS

The AAPG Bulletin is designed for the dissemination of information on the geology and associated technology of petroleum, natural gas, and other energy mineral resources. The AAPG Editor makes the final decision concerning the acceptance or rejection of a paper. Manuscripts are reviewed by two or more referees for technical merit, quality of scientific content, and utility of the results for practicing geologists.

Format your manuscript using double-spaced lines and 12-point type, and organized as described under **Manuscript Preparation**. Manuscripts must be submitted online through the Aries Editorial Manager® system ([www.editorialmanager.com/BLTN](http://www.editorialmanager.com/BLTN)). For reviewing purposes, the text must have line numbers. The figures and tables must be numbered. Questions about the submission process should be sent to [bulletin@aapg.org](mailto:bulletin@aapg.org).

## SUBMISSION TYPES

**Articles** are papers of major extent and contain detailed geologic data that support original interpretations or methods. Submitted article length is not to exceed 50 pages, including double-spaced text, figures, and tables.

**E&P Notes** are short, timely, general interest papers focused on current exploration plays and practical field descriptions to improve recovery. Submitted article length should not exceed 20 pages, including figures and tables.

**Geologic Notes** are brief, timely, and of general interest. Geologic Notes are not to exceed 20 pages, including figures.

**Geohorizons** papers focus on current technical methodologies. Geohorizons papers should not exceed 20 pages including figures and tables.

**Discussions and Replies** pertain to articles published in the AAPG Bulletin. They are brief, to the point, and are not to exceed 6 pages including figures and tables.

**Memorials** are not to exceed 800 words. Longer text is subject to approval by the AAPG Editor. E-mail [asharrer@aapg.org](mailto:asharrer@aapg.org) or phone (918) 560-2671 for more information.

## MANUSCRIPT PREPARATION

**Sections:** Organize manuscripts as follows: • Title • Author(s) and address(es) • Acknowledgments • Abstract • Text • Appendix(es) • References Cited • Figure captions (separate sheet) • Figures and Tables (separate from text)

### Manuscript Parameters

- Use metric units of measure with the English unit equivalent in parentheses or, conversely, English units with metric equivalents in parentheses. Laboratory measurements do not require conversions.
- Do not use abbreviations except for units of measure.
- Limit the use of acronyms. Please define all acronyms and nonstandard abbreviations used within figures and tables in each figure caption and table footnote.
- Cite figures in numerical order.
- Cite all references and include complete information for each citation in References Cited section.
- Limit the length of the abstract to no more than 250 words.
- Follow the North American Stratigraphic Code (see the AAPG Bulletin, v. 89, no. 11, p. 1547–1591, or online at <http://ngmdb.usgs.gov/info/NACSN/Code2/code2.html>).

### References Format

- Order references alphabetically. Order multiple listings by the same author(s) by date (earliest first).
- Single author journal article: Author's last name, initials, year, title of paper: full name of journal, v. x, p. xx–xx.
- Single author chapter or paper in a book: Author's last name, initials, year, chapter title, in editor's or compilers initials, last name, book title: city of publication, publisher, p. xx–xx.
- Single author book: Authors last name, initials, year, book title: city of publication, publisher, xxx p.
- Multiple authors: First author's last name, initials, initials and last name of second, third, etc. authors, year, etc.
- Maps: Author's or compilers last name, initials, year, map title: city of publication, map publisher, map scale, number of sheets.
- Computer programs on disk: Organization name, year, program name, version number: city of distributor, name of distributor.
- Internet: Author name(s), year of publication or last revision (if known), title of document, title or complete work (if applicable), URL, date of access.
- Work submitted or in preparation: Cite as personal communication.
- Please supply DOI numbers with all references when available.

## PERMISSION/COPYRIGHT

The author must obtain permission to use previously published illustrations. Submit a letter of permission from the copyright

holder with the manuscript before editing begins. A form to request permission is available on the AAPG Publications Web site (<http://www.aapg.org/publications/copyright>).

## ARTWORK PREPARATION

- For digital guidelines see "Electronic Submission Guidelines" (<http://www.aapg.org/publications/journals/bulletin/guidelines/electronic-submission>).
- Identify all figures by number.
- Figures must include scales.
- Axes must be labeled on graphs.

## Maps, Cross Sections, and Seismic Lines

Only countries that are recognized by the United Nations (see [www.un.org/en/sections/about-un/overview/index.html](http://www.un.org/en/sections/about-un/overview/index.html)) may appear on maps published in the Bulletin. Each map should contain a scale bar, north arrow, and a sufficient number (minimum of one set at or near each extremity) of coordinate (latitude, longitude) points to position, orient, and scale it, unless its sole purpose is to locate in general terms a larger scale map.

Each cross section and seismic line, as proprietary considerations allow, should be located on a map with the above basic information. If known, projection and geodetic datum information should be included. Satellite imagery, orthophotos, and similar metric photography should also be treated as maps. Authors are encouraged to submit, as supplementary documents, their maps originally prepared using the Geographic Information System (GIS) in a widely used geocoded file format (e.g., Arc Info, GEOTIFF).

## AAPG Datashare

Authors of AAPG Bulletin articles or book chapters may share data files related to but not necessarily included in articles. Large data sets, spreadsheets, and oversized or animated images may be placed online on the Datashare page and can be accessed at <http://www.aapg.org/datashare/index.html>. The material will be referenced in the printed article and linked in the online version.

## GALLEY PROOF

No content changes are allowed at galley proof stage.

## PAGE CHARGES

For all papers submitted July 1, 2019, the journal shall assess AAPG member authors mandatory page charges of \$75 for the 10th and each subsequent typeset page. The mandatory charge for excess pages shall be \$100 per page for nonmember authors. Authors shall be asked to pay voluntary charges of \$50 per page for the first 9 pages.

The exact number of pages in an article cannot be confirmed until shortly before printing. However, a reasonable estimate is the number of double-spaced text pages (including references) divided by 3 plus the number of figures and tables multiplied by .6 [(x/3)+(y+z)\*0.6]. Billing will take place after composition of the paper is complete. No charges are assessed if a submitted manuscript is not published.

In addition to these charges, there may be charges for changes requested in the typeset proofs that alter the text or figures in the accepted manuscript. The AAPG Publications Department staff will determine such charges from the proofs that reflect the changes.

It is AAPG's policy to suspend publication privileges of any author who has a past-due account with the association.

## Hardship Relief

AAPG does not intend for page charges to prevent any author from publishing in the journal. AAPG expects that all authors with the personal, research-grant, or institutional resources to pay voluntary and mandatory page and color charges will do so. For more information on hardship relief and whether you qualify, visit the AAPG Publications website.

## COVER PHOTOGRAPHS

The Bulletin considers good-quality digital images or 8 × 10 photographs, or digital images of geologic interest for the cover. Images should be approximately 300 ppi; the Bulletin cover is 8 inches by 10 ½ inches. Multiple submissions are welcome.

# REFERENCE STYLE CHECKLIST

## REFERENCES CITED

References must be complete and accurate.

All references listed in References Cited must be cited in the manuscript.

Names, spellings, and dates between text and References Cited must be consistent.

References that have one author, two authors, or a group of authors who published more than one work in one year must be differentiated by adding a, b, c, etc., after the year (1991a).

Works accepted for publication are cited as “in press;” the year is not given. Example: (Jones, R. B., in press, Fluvial and lacustrine rocks . . . p. 91–121.

Unpublished references must be cited as personal communications (C. J. Rockfall, 1998, personal communication) and are not listed in References Cited.

Add doi number when possible.

## TEXT CITATIONS

References are not allowed in abstracts.

Works are cited chronologically first, then alphabetically. Example: (Harvey, 1989, 1992; Allmendinger et al., 1990, Beer et al., 1990; Jordan et al., 1993; Milana, 1994; and Fernandez, 1995).

Initials are used when referencing two or more authors who have the same last name. Example: (E. N. Barbat, 1995; W. F. Barbat, 1995).

Articles or books that have three or more authors or editors are cited with the senior author’s name plus “et al.” Example: (Barker et al., 1995).

Works by the same author in the same year are cited “1980a, b,” not “1980a, 1980b.”

A page number must be given when a direct quote is used. Example: (Allmendinger, 1991, p. 1492).

Unpublished references must be cited as personal communications (C. J. Rockfall, 1998, personal communication) and are not listed in References Cited.

## ORDER OF CITED INFORMATION

Use the following order of information within a reference.

**Journal Article:** author name(s), year of publication, title of article, name of journal, volume number, issue number (optional), page numbers. Example: Carstens, H., 1978, Origin of abnormal formation pressures in central North Sea Lower Tertiary clastics: *The Log Analyst*, v. 129, no. 1, p. 24–28.

**Book Article:** author name(s), year of publication, title of article, editor(s) of book, title of book, city of publication, publisher, series and any number, volume number, number of pages. Example: Posamentier, H. W., and P. R. Vail, 1988, Eustatic controls on clastic deposition II—sequence and systems tract models, *in* C. K. Wilgus, B. S. Hastings, C. G. St. C. Kendall, H. W. Posamentier, C. A. Ross, and J. C. Van Wagoner, eds., *Sea-level changes: An integrated approach*: SEPM Special Publication 42, p. 125–154.

**Book:** author or editor name(s), year of publication, title of book, city of publication, publisher, number of pages. Example: Riley, J. P., and R. Chester, 1971, *Introduction to marine chemistry*: New York, Academic Press, 465 p.

**Map:** author name(s), year of publication, title of work, city of publication, publisher, series and any number, scale, number of sheets. Example: Harris, A. G., L. D. Harris, and J. B. Epstein, 1978, Oil and gas data from Paleozoic rocks in the Appalachian basin: U.S. Geological Survey Miscellaneous Investigations Map I-917-E, scale 1:2,500,000, 4 sheets.

**Thesis:** author name(s), year of publication, title of work, name of the degree, university, city of location, number of pages for thesis. Example: " . . . Master's thesis, Rice University, Houston, Texas, 200 p."

**Internet:** author name(s), year of publication or last revision (if known), title of document, title of complete work (if applicable), URL, date of access (accessed January 1, 1998.) Example: Rocky, I. M., 1998, The oil patch: <http://www.geology.oilpatch.edu/article.html> (accessed January 5, 1998). If there is a digital object identified (DOI) for the source, include it in addition to page numbers and other locators: Friedman, J. W. and C. Mezzetti, 2001, Learning in games by random sampling: Journal of Economic Theory v. 98, no. 1, doi:10.1006/jeth.1=2000.2694, <http://www.idealibrary.com/links/doi/10.1006/jeth.2000.2694>.

## FORMAT

List senior author's last name first, followed by initials; thereafter, list initials then author's last name (Walter, L. M., A. M. Stueber, and T. J. Huston).

Repeat all author or editor names; do not use em dashes for author names.

List all authors/editors unless the work has more than 10 authors/editors, then list first author/editor "et al."

Leave a space between the initials of an author's name.

Use this style if the paper is from a book of papers: ". . . in J. J. Jones and B. B. Bark, eds., This is a rock. . ."

Use the punctuation and spelling the author gives for the title.

Follow the same capitalization style that is used in the text for formal names.

List a range of pages for an article in a book or journal; list the total number of pages for a book.

Use an en dash between the page range.

Spell out all journal names except AAPG and SEPM.

Use the initial word cap/lower case for titles of papers and books that are listed before the colon preceding publication details, but major words initial cap for those that follow the colon.

Do not use "#" or "no." before the number of a series (AAPG Continuing Education Note Series 15; AAPG Studies in Geology 3; AAPG Memoir 15, etc.).

Designate an abstract with "(abs.)" after the title of the abstract.

List the city, the publisher, then number of pages for books; i.e., ". . . New York, John Wiley, 550 p."

List the university, the city, then number of pages for theses; i.e., ". . . Oklahoma State University, Stillwater, 50 p."

Do not list the name of the state of the publisher if the city is well known.

Do not include unimportant words in publisher names (Inc., Publishers, Co., etc.)

Drop the name of the city of publication for periodicals.

Use the ampersand instead of "and" for the *Oil & Gas Journal*, and place issue date in parentheses following volume number.

Leave the issue number in if the author included it; if not, don't add it.

Use the abbreviation "2nd ed." for second edition and "3rd ed." for third edition.

## ORDER OF REFERENCES CITED

Works are ordered alphabetically by author, regardless of number of authors.

If an author or set of authors has more than one work, order by date, oldest to newest.

# ELECTRONIC SUBMISSION GUIDELINES FOR AAPG BULLETIN

Authors are asked to submit new manuscripts online through the Aries Editorial Manager® ([www.editorialmanager.com/BLTN](http://www.editorialmanager.com/BLTN)), where they can track their manuscripts from submission through publication.

Preparing computer files in one of the preferred computer applications increases the likelihood that graphics will be rendered correctly. Success in translation depends upon the complexity of the document. If submitting by mail, please also provide high-quality laser prints for scanning in case translation problems occur. Do not provide graphics in word processing programs.

Low-resolution files may be submitted for reviewing purposes but final files for print production must be high resolution. It is best to create high-resolution graphics and then generate a low-resolution version for Web review purposes. Low-resolution graphics transmit faster. Keep in mind that once the illustration is created, resolution can be decreased but not added.

## SUBMISSION FORMATS

### Text and Tables

Microsoft Word (.doc; .docx)  
Microsoft Excel (.xls; .xlsx)  
RTF

### Graphics

TIFF or EPS created from the following supported applications  
Adobe Illustrator  
Adobe Photoshop  
Powerpoint

### Reviewing Purposes

All the previously listed applications  
plus PDF  
PostScript

## FILE PREPARATION

### Text

Save text files in their original application: double-spaced, 12-pt. font size, line numbers, and page numbers.

### Tables

Save tables without rules and borders. Do not create or embed tables in the text file. Save each table as a separate file.

### Graphics

- Save graphics files in the EPS format with a Macintosh preview (color preview for color files), when possible. Otherwise, use TIFF (color files as CMYKTIFF). Include native application files.

- Save graphics at the recommended resolutions for acceptable quality for printing. Resolutions in graphics files must be at least

  - 1200 dpi for line art

  - 300 dpi for gray scale

  - 600 dpi for combinations (line and gray scale)

  - 300 dpi for 4-color

  - Do not use fonts to create patterns within figures.

- When graphics files are placed into other graphic files, both files must be provided for printing and editing. Please include the final combined figure and a separate file for each placed graphic.

- Avoid saving color graphic files in the TeachText or SimpleText applications.

- File compression is encouraged. Use either Winzip (Windows) or Stuffit (Mac). Do not use JPEG or LZW compression.

## GRAPHICS NOTES/TIPS

All graphic files are converted to TIFF, or EPS format for publication in the journal. Once converted, text and patterns may change or disappear. Fonts may be substituted and patterns may not match the original after conversion due to differences in the software availability of patterns for printing. During the galley review stage, authors must examine figures closely and point out any discrepancies that may change the figure meaning. We may ask for a new figure file if the quality of the original is poor.

If you have any questions about how to submit your digital text and graphics, contact us via email: [bulletin@AAPG.org](mailto:bulletin@AAPG.org).



To publish the figures in your article with the highest quality, it is important to submit digital art that conforms to the appropriate resolution, size, color mode, and file format. Authors who do not comply with these guidelines will be asked to resubmit their figures in a print-quality format, which may delay publication.

**Sizing and preparation:** Submit figures at their final publication size; do not scale figures. Prepare figures at 1, 1.5, or 2-column width. (See the table to the right.) Figures can also be placed broadside (landscape) on a page. The height of all figures must be less than or equal to 9" / 23 cm / 54 picas.

| Columns | Inches | Centimeters | Picas |
|---------|--------|-------------|-------|
| 1       | 3.25   | 8.25        | 19.5  |
| 1.5     | 5      | 12.7        | 30    |
| 2       | 6.75   | 17.1        | 40.5  |

**Labeling and Font Usage:** Provide labels for all multipanel figures using lowercase 12 point Helvetica Bold or Arial Bold surrounded by parentheses; for example: (A), (B), (C). For text within the figures, please use the same font for all figures in your manuscript, and use a standard font such as Arial, Helvetica, Times, Symbol, Mathematical Pi, and European Pi. Do not use varying letter type sizes within a single figure; use the same size or similar sizes throughout. The preferred font size is 8 points; the minimum font size is 6 points.

## Two categories of Digital Artwork:

- **Raster Images** (i.e. pixel-based; also called bitmapped images; TIF and JPG files support only raster data) or
- **Vector Images** (i.e. object-based; EPS, AI, and PDF files support both vector and raster data.)

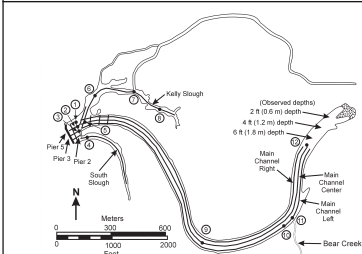
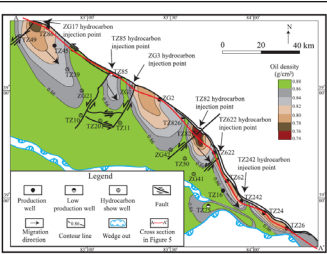
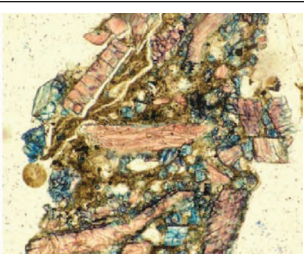
Vector images are preferred because they have the highest quality and produce the best results in publication.

**Resolution and Raster Images:** Low-resolution raster images are one of the leading causes of art resubmission and schedule delays. Submitted raster (i.e. pixel-based) images must meet the minimum resolution requirements.

Raster images can be classified as monochrome (line-art), halftone, or combination halftone.

TIF or PNG file formats are preferred for raster-only images.

- **Monochrome (1-bit) images (line-art):** Common examples are graphs and charts made of solid black and white, with no gray or color values. The suggested minimum resolution for this type of image is 1000 ppi at publication size.
- **Combination Halftones:** Common examples are color or grayscale figures containing halftone and line art elements. The suggested minimum resolution for this type of image is 600 ppi at publication size.
- **Halftones:** Common examples are color or grayscale figures containing pictures only, with no text or line art. The suggested minimum resolution for this type of image is 300 ppi at publication size.

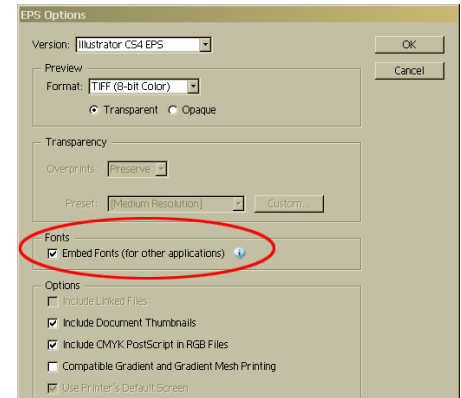
| Monochrome<br>(line-art)  | Combination Halftones<br>(grayscale or color images<br>with text or line-art)       | Halftones<br>(grayscale or color images<br>with no text or line-art)                  |
|---|---|---|
|  |  |  |
| 1000 ppi at publication size  | 600 ppi at publication size   | 300 ppi at publication size   |

**Color Mode:** All color image files must be submitted in their original RGB color. To ensure accurate color in publication when you work with raster images, it is best to use an application that supports ICC profiles, such as Adobe Photoshop. Whatever application you use, be sure to always embed the originating ICC profile when saving the file. This is usually the default behavior - for example, this screen shot is from the Save As... dialog box in Photoshop. The box to embed the ICC profile is checked by default, just be sure to leave the box checked. If you are using a different application, please check the documentation to be sure you are properly embedding the ICC profiles.



**Vector Graphics:** Vector images are typically generated using drawing or illustration programs (e.g., Adobe Illustrator) and are composed of mathematically defined geometric shapes - lines, objects, and fills. Vector graphics are resolution independent and can be enlarged to any size without quality loss.

- **Vector line art:** Common examples are graphs and charts created in illustration programs. It is preferable to have these saved as EPS files, with all fonts embedded or converted to outlines, and graph lines at least 0.25 points thick.
- **Combination line/halftone:** Common examples are color or grayscale figures containing halftone and line art elements. The halftone elements should be processed in Photoshop and the line elements in Illustrator, and the two elements from the two applications should be combined in Illustrator. It is preferable to have these saved as EPS files, with all fonts embedded or converted to outlines, and graph lines at least 0.25 points thick.



**Microsoft Office:** Figures submitted in Word, Excel, or PowerPoint are acceptable but should be avoided if possible. If MS Office is your only choice, please follow these general rules to ensure that the file is properly prepared:

1. Do not use pattern or textured fills in graphics. Instead, use solid fills or percentage screens: these will be effectively maintained as vector data during file conversion. **Note:** A 20% difference in percent screens is most effective for differentiation.
2. Artwork placed within any MS Office application should be of acceptable minimum resolution for print production: 300 ppi for halftones, 600-900 ppi for combinations, and 1000-1200 ppi for line art.
3. When inserting pictures/images into files, be sure to select "insert" rather than "insert link." The latter will not properly embed the high-resolution image into the MS Office file.
4. For each and every file created in MS Office, **before** saving the file, choose File>Options>Advanced and check the box labeled "Do not compress images in file." (This will help ensure that high resolution is maintained.)
5. Always embed fonts in your documents.  
See the guidelines below for embedding fonts in MS Office documents.

#### Embedding Fonts in MS Office:

- From the file menu, select Save As...
- From the **Tools** menu, select **Save Options...**, then check the **Embed Fonts in the file** box as shown below. These screen shots are from MS Office 2007 for Windows. If you are using a different version, these boxes may look different, but the instructions above should suffice.

