

Figure Guidelines

General requirements

- Figures should appear sharp and crisp when viewed at 120% in an image viewer.
- Ideally, figure files should be in TIF format at 600 dpi, with LZW compression to reduce file size.
- View your figures at their final intended size and check that all text is clearly legible.
- All labels should be in Arial, Helvetica or similar sans serif font.
- Parts lettered A, B, C ... AA, AB ...; no numbering.
- Make sure that any labelling is clearly legible against the background, and that lines are thick enough to see at the final image size.
- Arrange figure elements as logically as possible and avoid overcrowding.
- Use portrait (not landscape) format.
- Scale bar measurements for specimen images should be in the caption, not on the figure.
- Avoid:
 - Drop shadows
 - Outlined text
 - Italics (except for taxon names)
 - Unnecessary colour – especially for text
 - Use of red and green as contrasting colours.

Colour

- Avoid the use of unnecessary colour, it can cause a distraction.
- Coloured text can be harder to read, especially if it is small.
- Red and green are the two colours that are most likely to be indistinguishable to some readers. Although there are many different forms of colour blindness that could be taken into consideration, as a general point it is a good idea to avoid using this particular combination as contrasting colours on any figure. There are some recommendations here: <https://tinyurl.com/y6dbr6y4> (with more information here: <https://tinyurl.com/y27fv377>); and also <https://tinyurl.com/vjyd2zk> or <https://tinyurl.com/kznmhdx>, <https://personal.sron.nl/~pault/> or <https://colorbrewer2.org>.
- This is a useful tool for checking the colour on your images (you need to upload your images in JPG format): <https://www.color-blindness.com/coblis-color-blindness-simulator/>.
- Consider using a combination of colour and symbols to make the distinction clear.
- Avoid using a rainbow spectrum. Using intense colours at both ends of a spectrum can be misleading (and also difficult to interpret if: (1) for some reason the image is printed in black and white; or (2) the reader cannot distinguish red and green). Please consider the recommendations made here: <https://tinyurl.com/y69pc6n7>
- Please supply colour figures in RGB mode.

Resolution

Although we are no longer printing, it is possible to zoom in and access much higher resolution in the HTML edition of the journal allowing readers to see more detail in images. This is particularly useful for specimen images and we therefore still request high resolution images if possible. Ideally:

- TIFF at 600 dpi with LZW compression.

Figure size

- 166 mm full page width (= 3924 pixels at 600 dpi)
- 80 mm single column (= 1890 pixels at 600 dpi)
- 110 mm two-thirds page width (= 2598 pixels at 600 dpi)
- Indicate the final intended size of each figure by adding 166, 110 or 80 to the file name (e.g. Fig1_166.tif).

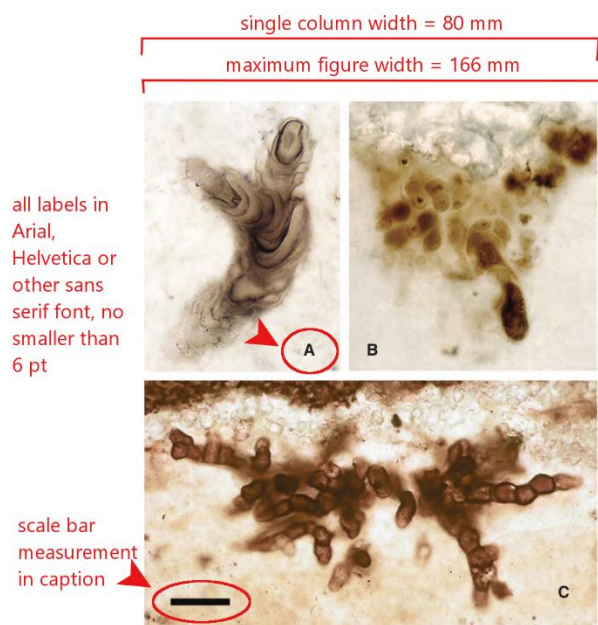


FIG. 3. Putative subsection-II fossil cyanobacteria. A, *Polybessurus bipartitus*, a stalked unicellular fossil broadly comparable to a modern baeocyte-forming marine cyanobacterium, but also freshwater non-baeocyte-forming *Cyanostolon*; from the late Mesoproterozoic Hunting Formation, arctic Canada (Butterfield 2001). B, *Fohvella cambellii* (type specimen), an endolithic

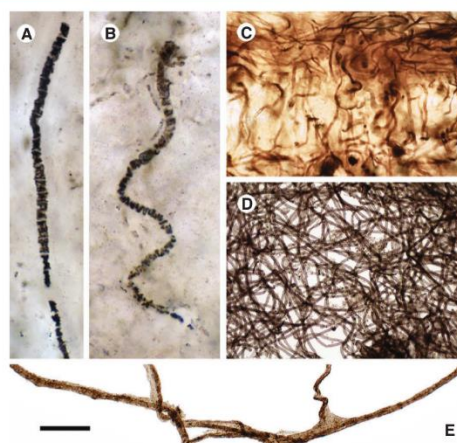


FIG. 4. Filamentous microfossils of probable cyanobacteria (subsection-III). A–B, silicified *Halythrix* sp.; from the Palaeoproterozoic Kasegalik Formation, Belcher Supergroup, Canada (Hofmann 1976; GSC 42769). C, silicified *Siphonophycus* sp. exhibiting the alternating vertical/horizontal orientation typical of mat-building photosynthetic cyanobacteria; from the early–middle Neoproterozoic Limestone–Dolomite Series, upper Eleonore Bay Group, East Greenland; photograph courtesy of A. H. Knoll. D, *Siphonophycus* sp. showing entangled mat-like habit in two dimensions (acid-isolated from shale); from the early Neo-

Text size

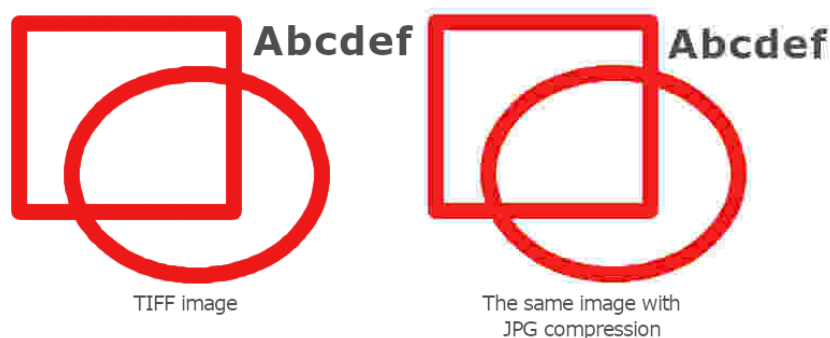
- Please view your figures at their final intended size and check that all labels are in proportion and clearly legible.
- Text should not be too big or too small.
- Although most readers will view papers online (and will therefore be able to change the size at which they view the image) it is still a good idea to ensure that the size of text is well balanced across the image, and using the nominal PDF page width is a good starting point.
- Use a ruler to check the actual size of your figure on screen and assess visually whether all text is clearly legible.
- As a guide, the text size used in figure captions in the journal makes a suitable size for most figure labels.

Scale bars

- When creating scale bars, please define a heavy weight line, rather than drawing a thin, filled box shape. The apparent thickness of a box can vary when converted to PDF and viewed at different magnifications.
- Scale bar measurements should be included in the caption, not on the figure (except for those on maps); e.g. All scale bars represent 1 mm; Scale bars represent: 5 mm (A–I, N–Q); 1 mm (J–M).

File type

- TIFF (tagged image file format) is strongly preferred. High resolution PDF, EPS and Illustrator files are also acceptable. PDF conversion can seriously degrade an image and is not advisable unless you are careful with the settings.
- Vector images can be supplied in EPS format or as Illustrator files. Please ensure that fonts are embedded in any EPS files.
- Do not save figures in JPG format at any stage as data is lost and cannot be recovered. If you have already saved any part of a figure as a low quality JPG, you will need to go back to an earlier version. The only exception to this is the very high quality JPG images, such as those created by digital cameras.
- JPG compression can result in lines become less clear and speckling around edges:



- Do not scale up low resolution files to meet size or dpi requirements. Use an earlier, higher resolution version.

File size

- Compress all layers in TIFF files by flattening them.
- Ensure that greyscale images are saved in Grayscale mode.
- Use LZW compression for TIFF images.
- Make sure that the bit depth of your figures is at 8 bits/channel (8-bit mode); 16 or 24-bit figures will be unnecessarily large.
- Reduce file size by cropping out unnecessary white space around the borders of your figures or by removing any titles or file names (all descriptive information should be included in the caption). However, please do not crop too close; a 1–2 mm border is ideal.
- Check the physical size of your image. To be 600 dpi, the figure only needs to be 3924 pixels wide for full page width, 2598 pixels for 2/3 page width, or 1890 pixels for single column width.

Content attribution

- Ensure that you have obtained any necessary permissions to reproduce images from previously published works. There is often a link to a request form on an article webpage. Our publisher is an STM Agreement signatory so this should be a formality.
- Simply re-drawing an image is not sufficient to claim that an image has been modified. You must add data or request permission to reproduce the image.
- Any figure including a **Google Earth** image should have relevant data attribution in the caption (see <https://about.google/brand-resource-center/products-and-services/geo-guidelines/#required-attribution> for details on where to find this). However, satellite images are often low resolution; it is usually more effective to sketch the relevant features.

- **PhyloPic** silhouettes:
 - Check the licence associated with each image for any attribution requests (not all images have the same requirements).
 - Usually, you should include the name of the artist and the licence type (e.g. Silhouette images from PhyloPic (<http://phylopic.org>: Christine Axon (cynodont), ...; all CC0 1.0).
 - For silhouettes with a non-commercial (CC BY-NC-SA) licence you will also need to request permission from the artist. There should be a contact link on the image page. Please indicate the intended use (e.g. inclusion in a figure in an academic article) and relevant details such as the titles of the article and the journal, and confirm in your cover letter that permission has been obtained.
- **Fossilworks** data sets: you should credit both the site and the database that is the underlying source of the data. Major contributors should also be listed by name in the acknowledgments section of your paper. Fossilworks suggests a reference in the following style (adjusted for our journals):
Behrensmeyer, A. K. and Turner, A. 2013. Taxonomic occurrences of Suidae recorded in the Paleobiology Database. *Fossilworks*. <http://www.fossilworks.org>