

# **PALYNOLOGY - INSTRUCTIONS FOR AUTHORS**

## **1 INTRODUCTION**

These *Instructions for Authors* will help potential authors construct and format their manuscripts for the journal *Palynology*. Please pay careful attention to these guidelines, so that your manuscript can progress through the editorial and production processes efficiently. The Managing Editor reserves the right to return manuscripts that do not conform to the specified format. Following this brief introduction, the instructions are subdivided into four more sections. Section two comprises 23 general points to note during manuscript preparation; this can be used as a checklist when writing, or when the first draft is complete. Section three gives detailed instructions as to how to format manuscripts and is divided into 11 subsections. Sections four and five are brief details of repositories for type/figured material and supplementary data respectively.

I have attempted to cover all the major points here, but am aware that no *Instructions for Authors* can ever be fully comprehensive. This being the case, it is always useful to refer to a recent issue of *Palynology* when writing, as an example.

All manuscripts will be sent to two peer reviewers for assessment of scientific merit. Authors should feel free to suggest suitable peer reviewers to the Managing Editor. However, please note that any suggested referees may or may not be used. If a manuscript is accepted for publication in *Palynology*, it is assumed that all the authors agree that the copyright of both the text and illustrations become the property of the American Association of Stratigraphic Palynologists (AASP) Inc.

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United Kingdom

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## 2 GENERAL POINTS

1. High quality manuscripts written in U.S. English on any aspect of pre-Quaternary or Quaternary palynology will be considered for publication. Please carefully follow these instructions for formatting and organization.
2. Authors should submit manuscripts either by e-mail, on a CD, or on paper (or any combinations thereof) to the Managing Editor.
3. If you are submitting digitally, send the manuscript as a **single** file. This file should include all the sections including any appendices, captions, tables, text-figures, and plates. For initial submission and review purposes, a single pdf file, or a Microsoft Word document with embedded display material is ideal. Digital manuscripts sent as multiple files in different formats are unacceptable, and will be returned to the author(s) for consolidation.
4. If you prefer to submit on paper, enclose three copies of the text, plus all the appendices, captions, tables, text-figures, and plates as appropriate. All display materials, especially any plates, must all be clear and suitable for review purposes.
5. Text. The preferred word processing program is Microsoft Word (MS Word). The desktop publishing/typesetting program currently being used is Adobe PageMaker 7.0 for a Macintosh computer. However, file exchange programs allow us to read almost any text written on IBM/PC or a Macintosh word processing programs. Save the file in its original format, convert it to Microsoft Word, or as a rich text (rtf) file. Do not save files as ASCII text; files saved in ASCII format will not, in most cases, retain formatted attributes such as italics and underlining. Indicate both the filename and the version of the word processing or graphics program used. If you do not have access to a computer word processing program, type the manuscript with a new ribbon using a non-proportional font (e.g. Courier), so that the manuscript pages can be easily scanned and the information transferred to a word processing program.
6. Display materials/graphics. The print shop we use requires digital files for all the display materials; it does not 'shoot film'. We can use graphics made in Adobe Illustrator CS2, Canvas 9, Corel Draw 11, and Freehand 9. Regardless of the graphics program used, send the native file. Photographs are preferred in Adobe Photoshop, however tif files are acceptable. If you supply display materials in analog format, we will scan them. Please bear in mind that scanned gray-scale shading reproduces poorly; use a pattern rather than shading. Shading in native digital files will reproduce well.

7. Manuscripts must be typewritten, and double-spaced throughout. Please use the ‘double space’ option in your word processing program for running text, as opposed to a ‘key stroked double carriage return’. Use 2.5 cm margins on all sides. Use only one side of each page, and remember to number pages consecutively in the upper right-hand corner.
8. All the text should be left-justified; do not right-justify any of the text. Use a carriage return only at the end of a paragraph and/or when you want the next portion of text to be on the following line. Use a double carriage return prior to a Genus citation in the ‘Systematic Paleontology’ section. Use a single carriage return after a Genus citation, and before and after First-Order, Second-Order and Third-Order headings. All First-Order, Second-Order and Third-Order headings should be in bold font.
9. Italicize words in the manuscript that are to be set in italic font. In particular, remember to italicize all generic and subgeneric names. Do not italicize ‘et al.’ in the running text.
10. Use only one space after the period at the end of each sentence. The use of the “Show/Hide” facility in MS Word is **strongly** recommended. This facility clearly shows all spaces, tabs, paragraph breaks etc., and will help you avoid inappropriate spacings. The “Show/Hide” button is on the standard toolbar and is indicated by a ‘¶’ symbol.
11. Provide the relevant author citations for all palynomorph names at and below species level at the first mention in the running text. If these are numerous, consider providing an Appendix listing the taxa in alphabetical order with full author citations (see for example *Palynology*, 29, p. 140-142). Note that author citations do not constitute references that should be listed in the ‘References Cited’ section.
12. Do not abbreviate generic names (even in listings); the information lost is not worth the space saved; e.g. *Cyathidites australis* and *Cyathidites minor* and not *C. australis* and *C. minor*. Additionally, certain bibliographic services scan papers for key words, hence any abbreviated taxonomic names will be lost to this process.
13. Remember to refer to all the display materials (i.e. Appendices, Plates, Tables, and Text-Figures) in the running text of the manuscript. Furthermore, check that these ‘call-outs’ appear in the text in sequential order, e.g. Text-Figure 1, Text-Figure 2, Text-Figure 3; Appendix 1, Appendix 2 etc. It is imperative that all the display materials are ‘called-out’ in sequence.
14. Ensure that all the bibliographic references to existing literature in the running text, captions, and display materials are listed in alphabetical order in the ‘References Cited’ section. Also ensure that the references are in the correct style (see subsection 3.9 below). For example, use a keystroked tab indent **before** and **after** the year of publication for each reference. Author’s names should be in capital letters, and use no spaces between the initials of author’s first and middle names. For multiple-author works, ensure that the final forename initial of all author’s names preceding the ‘and’, are followed by a comma. Use a comma after the journal title, and a colon between the volume/part number and the page number range.

15. When typing the manuscript, remember that the Production Editor will use the file you provide to transfer text into the final formatted style for *Palynology*. Following the guidance here will greatly assist in this transfer process. Do not try to 'force-format' the manuscript to look like the finished article in *Palynology*.
16. Do not break or hyphenate single words; include only the required hyphens.
17. Remember the use of the serial comma in US English, i.e. 'lower, middle, and upper' rather than 'lower, middle and upper'.
18. Ensure that any lists of items such as fossils, place names, stratigraphic units etc. are given in alphabetical order, e.g. Aalenian, Bartonian, Callovian, Devonian, Eemian, Frasnian, Gelasian, Homeric etc.
19. Record all measurements in metric units only. Imperial (English) units should not be used. The word 'micron' has been replaced by 'micrometer', which is abbreviated  $\mu\text{m}$ . If your word processing program does not have the ' $\mu$ ' symbol, simply type 'um'. Insert a single space between the number and the unit, e.g. 35 km; 37  $\mu\text{m}$  and not 35km; 37 $\mu\text{m}$ .
20. Use semicolons to partition the years in lists of references in the running text, e.g. (Smith, 1978; 1983; 1997; 2001).
21. If you wish to abbreviate 'approximately' etc., please use 'ca.' (note Roman font).
22. Do not use footnotes.
23. Contact the Managing Editor if you have questions that are not addressed in these instructions.

### **3 THE DETAILED ORGANIZATION OF THE TEXT AND DISPLAY MATERIALS**

Authors are not bound by any particular thematic format with regard to the organization or sequence of presentation of material, but all manuscripts must have a title, author details (i.e. names and addresses), abstract, key words, and list of references cited. Subject matter should be arranged as appropriate in sections with suitable headings. Headings must follow the format specified below (subsection 3.4).

#### **3.1 Title and author details**

Include a concise title and a list of the name(s) and affiliation(s) of the author(s). Consult recent volumes for examples, and prepare as follows:

Title. This should be in capital letters. Begin at the left margin (i.e. do not center title or author data).

Author(s). The author(s) name(s) should be written in capital letters.

Affiliation. The author(s) affiliation(s) should include full mailing address(s). Use capital and lower case letters as appropriate. Provide the e-mail address of at least the senior and/or corresponding author. Only use a superscript number after the author's name (e.g. JOSEPH P. BLOGGS<sup>1</sup>) to indicate a corresponding author. Consult recent volumes for examples.

#### **3.2 Abstract**

Each article must have an informative abstract that briefly summarizes the information and interpretations presented in the text. It should, therefore, be a condensation of the essential information in the paper. Include all new taxonomic names in the abstract. The word ‘abstract’ is capitalized and placed on a separate line flush with the left margin. The abstract should precede the main text, and normally should be no longer than one page. There is no need to separate the abstract with page breaks. Consult a recent volume of *Palynology* for an example. Note that the abstract is the most important section of the entire article in that it will be read by far more people than the main text. Authors must ensure that they have succinctly synthesized the principal findings. Remember that the abstract should be crafted to tempt the reader into reading the entire article! Please do not fall into the trap of describing the subjects covered. For example, do not state that a study ‘was carried out’, or use terms like ‘is discussed’ or ‘is described’ etc. See Landes (1966).

### 3.3 Key Words

*Palynology* does use key words. Place up to seven of these after the abstract, separated by a single carriage return. Try to list them in a logical order. ‘Key words:’ should be in bold font, and the key words should be separated by semicolons and the list should end with a period. For example:

**Key words:** Middle Eocene; Avon Park Formation; Florida; pollen; spores; systematics; paleoenvironments.

### 3.4 Headings

Three types of headings are used in *Palynology*. Please do not use more than three orders of headings. Details of the three orders are described below. Any section on systematics begins with modified headings and this is described in detail separately below (subsection 3.7). Note that all the orders of headings are in **bold font**. Examples of all three headings used can be found on pages 70 and 72 of *Palynology* 30 (2006).

First-Order Heading. First-order headings are centered, written in bold font, in capital letters on a separate line, and are separated by one carriage return/paragraph break from the preceding paragraph. A single carriage return/paragraph break should be placed after a first-order heading. For example:

(space)

#### **FIRST-ORDER HEADING**

(space)

Second-Order Heading. Second-order headings are centered, written in bold font, in capital and lower case letters as appropriate on a separate line, and are separated from the preceding paragraph by one carriage return/paragraph break. A single carriage return/paragraph break should be placed after a second-order heading. For example:

(space)

## Second-Order Heading

(space)

Third-Order Heading. Third-order headings are written in bold font in capital and lower case letters as appropriate, indented as in a normal paragraph, and followed by a period. Note that the entire third-order heading, including the period, is in boldface type. The text immediately follows a third-order heading. They are separated from the preceding and succeeding paragraphs by one carriage return/paragraph break. For example:

(space)

**Third-Order Heading.** Text blah, blah, blah...

(space)

### 3.5 References within the text

Follow the examples given here to cite previously published articles, display materials, and unpublished data as appropriate. Use semicolons to partition the years in lists of references in the running text, e.g. (Smith, 1978; 1983).

Single reference. Smith (1980), (Smith, 1980), Smith (in press), or (Smith, in press).

Multiple references. Smith (1980; 1981), (Smith, 1980; 1981), Smith (1980) and Jones (1982), (Smith, 1980; Jones, 1982), or (Smith, 1980; 1981; Jones, 1982; in press).

Two authors. Smith and Jones (1983), or (Smith and Jones, 1983).

More than two authors. Smith et al. (1984), or (Smith et al., 1984). Note that 'et al.' is in Roman font.

Text-Figures. Text-Figures 1, 2 if referring to the current manuscript, or text-figs. 1, 2 if referring to previously published material.

Plate Figures. Plate 1, figs. 2-5 if referring to a plate in the current manuscript, or pl. 1, figs. 2-5 if referring to a previously published plate.

Tables. Tables 1, 3 if referring to the current manuscript, or tables 1, 3 if referring to previously published material.

Appendices. Appendix 1 if referring to the current manuscript; or appendix 1 if referring to previously published material.

Unpublished Sources. R.K. O'Pyle (oral communication, 1982), or R.K. O'Pyle (written communication, 1982) as appropriate. Do not abbreviate these to 'oral comm.', 'pers. comm.', or 'written comm'.

### 3.6 Stratigraphy

General. For a detailed account of procedures in stratigraphy, authors are referred to Salvador (1994), and to the website of the International Commission on Stratigraphy (ICS) ([www.stratigraphy.org](http://www.stratigraphy.org)). Use informal phrases such as 'latest Cambrian' (for time) and 'uppermost Ypresian' (for rock), and not ungrammatical terms such as 'end Cambrian' and 'top Ypresian'.

Biostratigraphy. The fossil names forming part of a biostratigraphic unit (Biozone) name are written in italic font. For example: the *Sigaloceras calloviense* Biozone; the *calloviense* Biozone; the *Sigaloceras (Catasigaloceras) enodatum* Subbiozone; or the *enodatum* Subbiozone. Ensure that a clear distinction is made between biozones and chronozones (see below).

Geochronology. When discussing geochronology, use an upper case initial letter for all formal subdivisions of eon, era, period, epoch, age, chron, and subchron. For example Early Silurian, Middle Ordovician, and Late Paleozoic. Only chronostratigraphic divisions with internationally ratified boundary stratotypes have formal status. Lists of these are maintained by the ICS (see the International Union of Geological Sciences journal *Episodes*, and [www.stratigraphy.org](http://www.stratigraphy.org)). In all other instances, lower case initial letters should be used. In chronozones, fossil species names have a capital initial letter, and are written in Roman font, e.g. the Lamberti Chronozone.

Lithostratigraphy. The usage of lower, middle, and upper in relation to lithostratigraphic units is generally informal and the initial letters are not capitalised, e.g. the lower Speeton Clay Formation. Fossils forming part of a lithostratigraphic unit name have an initial capital letter, and are written in Roman font (e.g. Plenus Marls).

### 3.7 Systematics

The main heading is 'SYSTEMATIC PALEONTOLOGY' and is centered. The first- and second-order headers should not be in bold type; only the third order headers should be emboldened. All systematic section sub-headings should include the rank of the taxon (if not obvious), the name of the taxon, its author(s), and the year of publication. Reference should also be made to the Plate and Text-Figure number(s) and/or Text-Figure(s) in which specimens are illustrated. All this information is centered. See the following example.

Division DINOFLAGELLATA (Bütschli 1885) Fensome et al. 1993  
Subdivision DINOKARYOTA Fensome et al. 1993  
Class DINOPHYCEAE Pascher 1914  
Subclass PERIDINIPHYCIDAE Fensome et al. 1993  
Order GONYAULACALES Taylor 1980  
Suborder GONYAULACINEAE (autonym)  
Family GONYAULACACEAE Lindemann 1928  
Subfamily CRIBROPERIDINIOIDEAE Fensome et al. 1993

(space)

(space)

Genus *Scriniodinium* Klement 1957 emend. nov.

(space)

*Scriniodinium crystallinum* (Deflandre 1939) Klement 1960 emend. nov.  
(Plate 1, figs 1-4; Plate 2, figs 1-7; Plate 3, figs 4, 7; Text-Figures 1, 3)

Successive entries in the systematics section follow the format of the last three or four lines in the example. Synonymies usually follow a heading such as the one in the example. Synonymy entries should be set up as modified second-order headings in hanging-indent style (first line of entry flush with margin, subsequent lines of same entry indented). See the following three examples.

*Momipites coryloides* Wodehouse 1933

Plate 1, fig. 1

(space)

*Momipites coryloides* Wodehouse, 1933, p. 511, fig. 43; Frederiksen, 1969, p. 181.  
*Engelhardtia* sp., Fairchild and Elsik, 1969, p. 83, pl. 37, figs. 8-9; Elsik and Dilcher, 1974, p. 75, pl. 29, figs. 102, 105 only; Elsik, 1974, pl. 1, fig. 26.  
*Triatriopollenites* sp., Tschudy and Van Loenen, 1970, pl. 3, figs. 1-2.

*Momipites coryphaeus* (Potonié 1931) comb. nov.

Plate 1, fig. 2

(space)

*Pollenites coryphaeus* Potonié, 1931, p. 332, pl. 2, fig. 15 (basionym).  
*Coryli?-pollenites coryphaeus* (Potonié 1931) Potonié, 1934, p. 53-54; Potonié and Venitz, 1934, p. 22.  
*Triatriopollenites coryphaeus* (Potonié 1931) Thomson and Pflug, 1953, p. 80.

*Gonyaulacysta ceratophora* (Cookson & Eisenack 1960) comb. nov., emend. nov.

Plate 1, figs 1–9; Text-Figures 1C, D; Text-Figure 2

(space)

*Scriniodinium ceratophorum* Cookson and Eisenack, 1960, p. 249, pl. 37, fig. 7; Wilson, 1982, pl. 5, figs 13–16; Helby et al., 1987, text-fig 18C; Davey, 1988, pl. 10, fig. 8; Wilson and Helby, 1988, pl. 1, fig. 11.  
*Scriniodinium? ceratophorum* Cookson & Eisenack, 1960; Stover and Evitt, 1978, p. 187; Jan du Chêne et al., 1986, pl. 112, figs 1–3.  
*Scriniodinium* sp. cf. *S. ceratophorum* Cookson & Eisenack 1960; Helby et al., 1988, text-fig. 9S.  
*Scriniodinium?* cf. *ceratophorum* Cookson & Eisenack 1960 *sensu* Helby et al. (1988); Keating et al., 1992, text-figs 6i, j.

In the preceding examples, note especially the use of capitalization, italics, the ampersand (&), semicolons, commas (and omitted commas), and periods/fullstops. The following style points are illustrated: (1) a comma is inserted between author and date when they are references cited, but the comma is omitted between author and date when they are part of the name of a taxon; (2) the ampersand representing the Latin ‘et’ is used in taxonomic names where there are two authors, replacing the English ‘and’ used in references to a name only, i.e. not to specific literature and/or display material references; (3) subscripts designating references (e.g. 1931a) are always omitted from taxonomic names; (4) names are cited as in the original, even if they were subsequently altered; (5) references to illustrated specimens are specific; (6) synonymous citations in different



sources are combined; (7) new taxa are indicated by the format *gen. et sp. nov.*; *gen. nov.*; *sp. nov.*, etc.

Use third-order headings to begin subsections within the systematics section (e.g. holotype, derivation of name, diagnosis, description, dimensions, remarks, comparison, occurrences, stratigraphic distribution etc.). Note that these subheadings in this order are not mandatory, and can be adapted as necessary for the needs of the specific study. It should be remembered that the subject matter included in the systematic section is entirely at the discretion of the authors, but each of the topics mentioned above should be considered.

The articles of the 2000 International Code of Botanical Nomenclature (ICBN) (the 'St. Louis Code' - Greuter et al., 2000) must be followed for all nomenclatural procedures. It is especially important that any type material is curated at an appropriate repository. See also the information in section 4, on a potential repository for type specimens.

### **3.8 Acknowledgments**

Acknowledgments, which are a first-order section and are optional, are placed after the technical text, immediately before the 'References Cited' section.

### **3.9 References Cited**

The list of references is arranged alphabetically and chronologically by author and is placed at the end of the text, under the heading 'References Cited'. This heading is in bold font in capital and lower case letters, and is flush with the left margin. The list of references should include only publications actually cited in the text. The inclusion of an authors name and date as part of a taxonomic name does **not** constitute the citation of a reference. See the following examples of format for preparing the list of references. Please do not abbreviate any part of the titles of journals; the space saved is not worth the information lost.

Publications with one or two authors are ordered purely alphabetically and chronologically according to universal convention. Publications with the same first author, but more than one co-author are listed chronologically. This is a pragmatic solution; the second author's name is not normally cited in the text. Occasionally, publications with more than one co-author need to be cited which have the same first author, and which were published during the same year. Examples of these are the two books by J.C.W. Cope and others in 1980 (see below). The next author(s) as appropriate should be used to distinguish these publications and the examples used here would be cited in the text as Cope, Duff et al. (1980), and Cope, Getty et al. (1980) respectively.

If more than one paper with the same author(s) are cited, that were published during the same year, use a, b, c, d, etc. after the year to distinguish them, e.g. Evitt (1963a,b).

If you have cited more than one reference by the same author(s), remember to only write the author(s) names once only (see Evitt, 1963a,b below). Remember to italicize the journal name, and to include a comma after every author's forename initials except the last one. Try to include part numbers in parentheses after the volume number;

this is valuable information. A comma is used following the journal title, and a semicolon after the volume/part. Ensure that the spacing is correct throughout, i.e. a single space between the colon and the page range. Do not attempt to reproduce the spacing format of references in the Journal; our pagemaking software does this.

Use the following procedure:

SURNAME1, A.B., SURNAME2, C.D., and SURNAME3, E.F.G. [new line here]  
(tab) 2005(tab) Title of paper. *Name of Journal in Full*, 31(3): 45-56.

I.e., following the line for authors name(s), use a tab, then type the year, then use a second tab, then type the rest of the reference without using tabs, multiple spaces etc.

### Periodicals

SITTLER, C.

1954 Principe et application de l'analyse des pollens aux études de recherches du pétrole. *Revue de l'Institut Français du Pétrole*, 9(7): 367-375.

1955 Méthodes et techniques physicochimiques de préparation des sédiments en vue de leur analyse pollinique. *Revue de l'Institut Français du Pétrole et Annales des Combustibles Liquides*, 10: 103-114.

DELCOURT, A., and SPRUMONT, G.

1955 Spores et grains de pollen de Wealdien du Hainaut. *Memoires de la Societe belge de Geologie, de Paleontologie et d'Hydrologie*, nouvelle serie, no. 5, 73 p.

POTONIÉ, R.

1956 Synopsis der Gattungen der Sporae dispersae, I. Teil: Sporites. *Beihefte zum Geologischen Jahrbuch*, 23, 103 p.

EVITT, W.R.

1963a A discussion and proposals concerning fossil dinoflagellates, hystrichospheres, and acritarchs, I. *Proceedings of the National Academy of Sciences*, 49(2): 158-164.

1963b A discussion and proposals concerning fossil dinoflagellates, hystrichospheres, and acritarchs, II. *Proceedings of the National Academy of Sciences*, 49(3): 298-302.

LANDES, K.K.

1966 A scrutiny of the abstract, II. *Bulletin of the American Association of Petroleum Geologists*, 50(9): 1992-1999.

EVITT, W.R., CLARKE, R.F.A., and VERDIER, J.-P.

1967 Dinoflagellate studies III. *Dinogymnium acuminatum* n. gen., n. sp. (Maastrichtian) and other fossils formerly referable to *Gymnodinium* Stein. *Stanford University Publications, Geological Sciences*, 10(4): 1-27.

DEAN, W.E., Jr.

1974 Determinations of carbonate and organic matter in calcareous sediments and sedimentary rocks by loss on ignition: Comparison with other methods. *Journal of Sedimentary Petrology*, 44: 242-248.

HELENES, J.

- 1984 Morphological analysis of Mesozoic-Cenozoic *Cribroperidinium* (Dinophyceae), and taxonomic implications. *Palynology*, 8: 107-137.  
 FARABEE, M.J., and CANRIGHT, J.E.
- 1986 Stratigraphic palynology of the lower part of the Lance Formation (Maestrichtian) of Wyoming. *Palaeontographica Abteilung B*, 199: 1-89.  
 RIDING, J.B., MOORLOCK, B.S.P., JEFFERY, D.H., and HAMBLIN, R.J.O.
- 1997 Reworked and indigenous palynomorphs from the Norwich Crag Formation (Pleistocene) of eastern Suffolk: implications for provenance, palaeogeography and climate. *Proceedings of the Geologists' Association*, 108(1): 25-38.

#### Articles in larger publications

- LEOPOLD, E.B., and MacGINITIE, H.D.
- 1972 Development and affinities of Tertiary floras in the Rocky Mountains. *In: Graham, A. (ed.), Floristics and paleofloristics of Asia and eastern North America.* Elsevier, Amsterdam, p. 147-200.  
 SOHL, N.F., and MELLO, J.F.
- 1970 Biostratigraphic analysis. *In: Owens, J.P., Minard, J.P., Sohl, N.F., and Mello, J.F., Stratigraphy of the outcropping post-Magothy Upper Cretaceous formations in southern New Jersey and northern Delmarva Peninsula, Delaware and Maryland. U.S. Geological Survey Professional Paper, 674: 28-55.*  
 COPE, J.C.W., DUFF, K.L., PARSONS, C.F., TORRENS, H.S., WIMBLEDON, W.A., and WRIGHT, J.K.
- 1980 A correlation of Jurassic rocks in the British Isles. Part Two: Middle and Upper Jurassic. *Geological Society of London, Special Report, No. 15, 109 p.*  
 COPE, J.C.W., GETTY, T.A., HOWARTH, M.K., MORTON, N., and TORRENS, H.S.
- 1980 A correlation of Jurassic rocks in the British Isles. Part One: Introduction and Lower Jurassic. *Geological Society of London, Special Report, No. 14, 73 p.*  
 RAWSON, P.F., ALLEN, P.M., BRENCHLEY, P.J., COPE, J.C.W., GALE, A.S., EVANS, J.A., GIBBARD, P.L., GREGORY, F.J., HAILWOOD, E.A., HESSELBO, S.P., KNOX, R.W.O'B., MARSHALL, J.E.A., OATES, M., RILEY, N.J., SMITH, A.G., TREWIN, N., and ZALASIEWICZ, J.A.
- 2002 *Stratigraphical Procedure.* Geological Society, London, Professional Handbook, 57 p.  
 DAVIES, R.J., STEPHEN, K.J., and UNDERHILL, J.R.
- 1996 A re-evaluation of Middle and Upper Jurassic stratigraphy and the flooding history of the Moray Firth Rift System, North Sea. *In: Hurst, A., Johnson, H., Burley, S.D., Canham, A.C., and MacKertich, D.S. (eds.), Geology of the Humber Group: Central Graben and Moray Firth, UKCS.* Geological Society, London, Special Publication, 114: 81-108.

#### Articles in press

Use 'in press' only if the manuscript has been formally accepted for publication. Also note that a manuscript described as 'in preparation' is not publicly available and hence should not be quoted in *Palynology*.

MØRK, A., FORSBERG, A.W., ELVEBAKK, G., VIGRAN, J.O., WEITSCHAT, W., and HOUNSLOW, M.W.

in press The Vikinghøgda Formation, a new Lower Triassic type section for central and eastern Svalbard. *Polar Research*.

### Books

WODEHOUSE, R. P.

1935 *Pollen grains*. McGraw-Hill, New York, 574 p.

EVITT, W.R.

1985 *Sporopollenin dinoflagellate cysts. Their morphology and interpretation*. American Association of Stratigraphic Palynologists Foundation, Dallas, xvi + 333 p.

MOORE, P.D., WEBB, J.A., and COLLINSON, M.E.

1991 *Pollen analysis*. Second Edition. Blackwell Scientific Publications, Oxford, viii + 216 p.

OWENS, B., and MARSHALL, J. (compilers)

1978 Micropalaeontological biostratigraphy of samples from around the coasts of Scotland. *Report of the Institute of Geological Sciences*, No. 78/20, 35 p.

SALVADOR, A. (ed.).

1994 *International Stratigraphic Guide: A Guide to Stratigraphic Classification, Terminology, and Procedure*. Second Edition. International Union of Geological Sciences and the Geological Society of America, 214 p.

### Abstracts

de la RUE, S.R

2006 Quantitative particulate organic matter as an indicator of paleoproductivity and transgressive-regressive cycles in the Upper Devonian New Albany Shale source rock (Indiana). *Palynology*, 30: 214 (abstract).

MacRAE, R.A.

1998 Evolution of *Dinopterygium* and other goniodomaceans: problems and progress. *Abstracts from the Sixth International Conference on Modern and Fossil Dinoflagellates, Dino 6, Trondheim, June 1998*: 96-97 (abstract).

### Theses or dissertations

HUDSON, J.D.

1962 *The Great Estuarine Series (Middle Jurassic) of the Inner Hebrides*. Unpublished Ph.D. thesis, University of Cambridge, Cambridge, U.K., 350 p.

BOOTH, R.K.

1998 *Palynology and environments of deposition of sediments from two barrier islands: St. Catherines Island and Skidaway Island, Georgia, U.S.A.* Unpublished M.S. thesis. Georgia Southern University, Statesboro, Georgia, U.S.A., 213 p.

### Internet sites

- ROCHON, A., DE VERNAL, A., TURON, J-L., MATTHEISSEN, J., and HEAD, M.J.  
1999 *Distribution of recent dinoflagellate cysts in surface sediments from the North Atlantic Ocean and adjacent seas in relation to sea-surface parameters. Data Files and Tables from American Association of Stratigraphic Palynologists Foundation Contributions Series 35.* American Association of Stratigraphic Palynologists Data Committee, Palydisk 18. Available from: <http://www.palydisks.palynology.org/> (viewed 20 November 2002).
- GREUTER, W., MCNEIL, J., BARRIE, F.R., BURDET, H.-M., DEMOULIN, V., FILGUEIRAS, T.S., NICOLSON, D.H., SILVA, P.C., SKOG, J.E., TREHANE, P., TURLAND, N.J., and HAWKSWORTH, D.L. (eds.)  
2000 International Code of Botanical Nomenclature (St Louis Code). *Regnum Vegetabile*, 138. Koeltz Scientific Books, Königstein, Germany. Available from: <http://www.bgbm.org/iapt/nomenclature/code/SaintLouis/0000St.Luistitle.htm> (viewed 12 July 2006).

### 3.10 Illustrations

Plates. Photographic plates should be of the highest standard. The prints must be sharp, of sufficient contrast, and have an even tone. They must be entirely free of artifacts such as dust, scratches etc. The plate should be made up using images of a broadly similar size and shade/color balance/tone wherever possible; this will give a plate of balanced appearance. The edges of the photomicrographs should be straight, and all the borders should be even, relatively narrow and straight. The spacing of the prints should be as uniform as possible, and no space should be wasted. There is no need to write 'PLATE 1' on the plate itself as the respective plate number will appear in the header. However, identify each Plate with its number and author(s) on the lower front side.

Plates can be submitted using either or both digital and analog formats. If using either digital or analog formats, it is recommended that scale bars are included in case the Plate requires expansion or contraction during typesetting/printing. Arrange 'full page' plates to fit a 17.0 x 21.6 cm format (i.e. a ratio of 1.25 high to 1.00 wide). Plates that will not be full page size should be 17.0 cm wide. Plates should ideally be submitted at this size for 1:1 reproduction. Plates should be in their final form because they will be reproduced exactly as submitted. It is the author's responsibility to provide sequential plate-figure (photomicrograph) Arabic numerals (1, 2, 3, etc.) on plates (do not use Roman numerals or letters). Do not crop, rout, or cut out individual plate-figures. We prefer high-quality digital files (>600 dpi) of photo plates. We will make high-quality scans of analog plates.

Plates will normally be printed in black and white (grayscale). If color reproduction is required, the author(s) will have to meet the cost of this. Details are available from the Production Editor.

Each plate must be accompanied by a detailed explanation, which should include a concise statement about the plate-figures presented, including information such as focal level, geographic/stratigraphic information, key morphologic comments, lighting, magnification, orientation, sample/specimen numbers, etc. as appropriate. See examples in recent volumes for the organization and format of plate explanations. Submit plate

explanations within the main text on separate pages following the 'References Cited' section.

The title (e.g. PLATE 3) should be in capital letters and centered. If any information, e.g. lighting, magnification, etc., is common to all the plate-figures, give a generic statement before the plate-figure-specific data (see example below). If more than one plate-figure is of an individual taxon, give a consolidated explanation as opposed to several individual explanations (see examples below). Include all appropriate author citations in the plate explanation. Separate the plate-figure number(s) from the explanation text with a tab (see examples below). Please carefully follow these guidelines for plate explanations and if the manuscript includes several plates, be internally consistent with the plate explanation format. An example of a Plate explanation is given below:

## PLATE 2

All scale bars represent 50 µm. The photomicrographs were all taken using plain transmitted light.

1-7 *Scriniodinium crystallinum* (Deflandre 1939) Klement 1960 emend. nov. All specimens are typical of the Northern Hemisphere in that they lack indications of paratabulation except for the archeopyle and paracingulum. Note the possible presence of small apical and antapical horns/protuberances formed from periphragm, and the circumcavate cyst organisation.

1 Specimen MPK 12602, Ampthill Clay Formation, Middle Oxfordian, *Cardioceras tenuiserratum* Biozone of the Nettleton Bottom Borehole. A large specimen in dorsal view, high/median focus; note the apical claustrum.

2 Specimen MPK 4547, Ampthill Clay Formation, Upper Oxfordian, *Amoeboceras glosense* Biozone of the Nettleton Bottom Borehole. Specimen in dorsal view, median focus. Note the operculum inside the endocyst.

3 Specimen MPK 12603, Weymouth Member, Oxford Clay Formation, Lower Oxfordian, *Quenstedtoceras mariae* Biozone/*Cardioceras scarburgense* Biozone of the Warboys Borehole. A relatively small, squat specimen in ventral view, median focus; note the apical claustrum.

4 Specimen MPK 12604, details as fig. 1. A relatively large specimen in dorsal view, high focus. Note the clearly defined paracingulum.

5 Specimen MPK 12605, Weymouth Member, Oxford Clay Formation, Lower Oxfordian, *Cardioceras cordatum* Biozone of the Nettleton Bottom Borehole. Specimen in dorsal view, high/median focus. Note that the operculum is displaced.

6 Specimen MPK 3557, Weymouth Member, Oxford Clay Formation, Lower Oxfordian, *Quenstedtoceras mariae* Biozone/*Cardioceras scarburgense* Biozone of the Warboys Borehole. A relatively small specimen in ventral view, median/low focus. Note the displaced operculum, the apical and equatorial claustra.

7 Specimen MPK 12606, Ampthill Clay Formation, Upper Oxfordian, *Amoeboceras regulare* Biozone of the Nettleton Bottom Borehole. An elongate specimen in ventral view, median/low focus. Note the prominent equatorial claustra and the apical horn/protuberance.

- 8, 9 *Endoscrinium luridum* (Deflandre 1939) Gocht 1970. Note the rounded, subpentangular outline, the subcircular endocyst, and the gonyaulacalean paratabulation.
- 8 Specimen MPK 12607, details as fig. 1. Specimen in dorsal view, high focus. This is an exceptionally well-preserved specimen, note the small apical protuberance formed by periphragm.
- 9 Specimen MPK 12608, details as fig. 2. Specimen in ventral view, low focus. Note the folded antapical region.

Tables. Tables should be produced digitally, and each one must be typed on a separate page/pages. They should be held separately in an appropriate file format; Microsoft Excel is preferred. For review purposes, tables can be embedded in (or appended to) the text. However upon acceptance, they should be submitted as separate Microsoft Excel files. A brief and self-explanatory caption should accompany each table. The table captions should also be included with the other captions (e.g. Plates, Text-Figures, etc.). An example of a Table caption is given below; please follow this format.

Authors should note the page size, because a table should ideally not exceed the printed area of a single page. However, in certain cases, tables can be continued over several pages. Fold-outs can be accepted in certain cases, however the author(s) will be charged for the additional production/printing costs associated with fold-outs.

Tables will normally be printed in black and white (grayscale). If color reproduction is required, the author(s) will have to meet the cost of this. Details of color reproduction and fold-outs are available from the Production Editor.

Table 2. The abundance of dinoflagellate cysts, pollen-spores and other palynomorphs as dinoflagellate cysts per gram of sediment, together with the relative abundance of dinoflagellate cysts versus pollen-spores. Samples with <100 dinoflagellate cysts are asterisked.

Text-Figures. Text-Figures can be submitted using either or both digital and analog formats, although digital is preferred. Text-Figures should be prepared for reproduction at single-column (8.0 cm) or double-column (17.0 cm) width. The page height is 21.6 cm. For single column reproduction, the ratio of 2.5 high to 1.0 wide should be used. For double column reproduction, the ratio of 1.25 high to 1.00 wide should be used. If the submission is on paper, submit the original or a high-contrast print of each Text-Figure reduced to single- or double-column width. We will make high-quality scans of original Text-Figures that are submitted. Identify each Text-Figure with its number and author(s) on the lower front side. Each Text-Figure must be accompanied by a caption that is part of the text. Submit all captions sequentially at the end of the manuscript document, after the References Cited' section. An example of a Text-Figure caption is given below; please follow this format.

Text-Figures should ideally be submitted digitally. The files should be saved in the native format used to draw the figure. Preferred graphics formats are: Adobe Illustrator, Adobe Photoshop, Canvas, Corel Draw, and Freehand. If files were created using a different program, use Adobe Acrobat to make a pdf file. If this strategy is adopted, ensure to provide high-resolution files. The Production Editor will provide individual guidance on file formats etc. on request.

Fold-outs can be accepted only in exceptional cases and the author(s) will be charged for any extra production/printing costs associated with these large Text-Figures. Details are available from the Production Editor.

Text-figures will normally be printed in black and white (grayscale). If color reproduction is required, the author(s) will have to meet the cost of this. Details are available from the Production Editor.

Text-Figure 3. Map illustrating the location of the Arunta-1 and Buang-1 wells in the Timor Sea, offshore Western Australia, and the location of the Broome Number 3 Borehole in the onshore Canning Basin, Western Australia.

### 3.11 Appendices

Appendices containing supporting data, where appropriate, are inserted after the 'References Cited' section. Please supply and adequate caption/explanation for each Appendix. If there is more than one appendix, number them Appendix 1, Appendix 2, Appendix 3 and so on. See recent volumes for the detailed format (e.g. *Palynology*, 29, p. 137-142). Lengthy appendices, data tables etc. can be placed on the AASP website as a 'Palydisk' (see <http://www.palydisks.palynology.org/>). The use of 'Palydiscs' enables large amounts of relevant supplemental data to be made accessible on the AASP website (see section 5 below).

## 4 REPOSITORY FOR TYPE SPECIMENS

The 2000 International Code of Botanical Nomenclature (ICBN) stated that "For the name of a new species or infraspecific taxon published on or after 1st January 1990 of which the type is a specimen or unpublished illustration, the single herbarium or collection or institution in which the type is conserved must be specified (Article 37.6)." The Carnegie Museum of Natural History (CMNH) and AASP have established the Palynomorph Type Collection (PTC) at CMNH as a repository for palynomorph type and figured material. Authors may choose to deposit type material, and/or specimens illustrated in *Palynology* or any other scientific publications, in this collection. Guidelines for the PTC are presented below.

What Specimens To Submit. CMNH accepts two categories of specimens for inclusion in the PTC. These are: (1) nomenclatural types (i.e. holotypes, isotypes, lectotypes, neotypes, paratypes, and syntypes) as defined by the applicable version of the ICBN; and (2) any figured specimens, i.e. those illustrated in scientific publications. Voucher prepared organic residues of type or illustrated materials may also be submitted, however unprepared rock samples are not accepted.

All palynomorph specimens must be mounted on clean, high-quality, permanent glass slides. The slides must be clearly labeled with the taxon name, the author's name, and the appropriate specimen or sample number. The slides must be accompanied by: (1) a description of the preparation techniques used; (2) a description of the mounting medium and any sealants used on the coverslip; (3) slide coordinates, preferably from an 'England Finder', for each specimen; (4) a detailed description of the geographic location



and stratigraphic position of the sample from which each specimen was recovered, including annotated maps, if available; and (5) original copies of the relevant publication that contains the description of each nomenclatural type or, in the case of figured specimens, a copy of the publication containing the illustration of each specimen. Specimens mounted in special media, such as for scanning electron microscopy or in liquid media, may require special handling; contact CMNH before submitting such materials.

Voucher prepared organic residues that produced the type specimens or figured specimens may also be submitted, but are not required. Residues should be stored in securely sealed glass or plastic vials, clearly labeled with the necessary information and a description of the storage medium should be provided.

How To Submit. All materials to be submitted to the PTC should be sent to:

Mary Dawson  
Section of Paleobotany  
The Carnegie Museum of Natural History  
4400 Forbes Avenue  
Pittsburgh  
Pennsylvania 15213  
U.S.A.

E-mail: [dawsonm@carnegiemnh.org](mailto:dawsonm@carnegiemnh.org)

Website: <http://www.carnegiemnh.org>

Once accepted into the collection, all the type/figured materials will be permanently accessioned, and become the property of CMNH. Individuals wishing to note in their publications that the new type and/or figured specimens are deposited in the PTC should contact CMNH prior to manuscript preparation.

## **5 REPOSITORY FOR SUPPLEMENTARY DATA**

The AASP Data Committee was established in 1988 to promote the electronic exchange of palynological data and programs. Initially these were distributed on diskettes, and now are placed on an anonymous FTP. Each discrete dataset is termed a Palydisk. Twenty-three Palydisks are now available at: <http://www.palydisks.palynology.org/>. They are original material donated by palynologists, and typically associated with publications in *Palynology*. The data are placed in the public domain with the understanding that explicit acknowledgement of the original author, and AASP, will be given by any users. Palydisks should be referenced as follows:

PARDO-TRUJILLO, A., JARAMILLO, C.A., and OBOH-IKUENOBE, F.E.

2003 Appendix 1: Palynomorphs in the Uribe section, and Appendix 2: palynomorphs in the Sogamoso core. Appendices for 'Paleogene palynostratigraphy of

the eastern Middle Magdalena Valley, Colombia', *Palynology*, 27: 155-178. American Association of Stratigraphic Palynologists Data Committee, Palydisk 23. Available from: <http://www.palydisks.palynology.org/> (viewed 1 March 2007).

Comprehensively revised 14 March 2007 by James B. Riding