Instructions to Authors

1. GENERAL

Proceedings: Biological Sciences is published monthly. It contains announcements of important new developments in biology. Papers crossing the boundaries of subjects are particularly welcome. The normal maximum length is 4000 words including the abstract and references (plus four figures and/or tables; equivalent to five printed pages). With the same restriction on length, reviews containing original and interesting ideas, and extensions to, or criticisms of, papers already published (subject to the criteria of interest, originality and good manners) will also be acceptable. The target publication time is three months from receipt of a paper, excluding the time that the typescript is in the hands of the author. Authors are advised that papers prepared in accordance with these instructions will be given priority. Acceptance of a paper will be determined by its quality and interest.

Papers describing experiments with vertebrate animals will be accepted only if the procedures used are clearly described and conform to the British Home Office regulations for avoiding unnecessary suffering to the animals.

The format of the journal is A4 (297 mm × 210 mm), double column, with a normal text area of 235 mm × 167 mm.

2. SUBMISSION

Submitted papers must not have been published previously, nor be under consideration for publication elsewhere. Submission to Proceedings B requires that authors accept that the Editor has final authority in all matters relating to the acceptability and propriety of publication. Authors should send papers to the Proceedings B Editorial Office, The Royal Society, 6 Carlton House Terrace, London SW1Y 5AG, U.K. The date of the paper’s receipt will be published if the paper is accepted. Authors are asked to include their telephone numbers, fax numbers and/or electronic mail addresses in correspondence about the paper.

Four copies of the typescript and any figures (together with one set of original drawings and prints) are required. A word count should be included. The extra copies of any photographs should be prints rather than photocopies.

Papers should be submitted initially as typescripts. After a paper has been accepted, authors should submit the final version both on disk and as a typescript. Use of the disk cannot be guaranteed, but will depend on the format, the program used and the nature of the material. MS-DOS and Macintosh disk formats are equally acceptable. In addition to text files, we welcome the submission of electronically prepared artwork on disk.

3. COPY

Papers should be clearly typewritten, with double spacing throughout, on one side of the paper only, with a margin of at least 3 cm all round; all sheets should be numbered serially and securely clipped together. Typescripts must be carefully corrected by authors before being sent in. Spelling should conform to the preferred spelling of the Shorter Oxford English Dictionary. Footnotes should be avoided.

4. TITLE AND SUMMARY

It is very important that both the title and the summary should be comprehensible, and interesting, to the non-specialist. Authors are asked to make their titles as short and general as possible. The title should be typed on a separate covering sheet which should also bear the names of the authors and that of the laboratory or other place where the work has been done. Addresses for correspondence, where these differ from the place of work, should also be given, indicating to which author correspondence should be addressed, and giving telephone numbers, fax numbers and e-mail addresses. A very short title (maximum of 50 letters and spaces) suitable for page headings should be given, and up to six index entries should be provided for inclusion in the subject index. The summary should not exceed 200 words, and should be precise and informative.

5. SECTIONS

Papers may be divided into sections, described by short headings. Materials and methods sections should be marked in the margin for small type.

6. UNITS, SYMBOLS AND ABBREVIATIONS

As far as possible the recommendations contained in Quantities, units, and symbols (1975, The Royal Society, £3.00) should be followed; in particular the International System of Units (SI) should be used whenever it is practicable to do so.

Special care is necessary in differentiation between handwritten symbols of comparable shape, e.g. V v, W w W, s S, p P, T t. Marginal indications and differential underlinings should be used where necessary, the normal conventions being followed wherever applicable, e.g. ~~~ to signify bold characters. Mathematical variables should be underlined.

Wherever possible, only internationally agreed abbreviations should be used; see, for example, the list of accepted abbreviations for use in the Biochemical Journal.

7. STATISTICS

As far as possible, the presentation of statistics should follow the guidelines published each year in the December issue of the Proceedings.

When referring to computer programs, authors should specify clearly the procedures used, and should quote publications that will allow the reader to ascertain how they are carried out.
8. ILLUSTRATIONS

Proceedings B welcomes the submission of papers containing colour illustrations. However, owing to the high cost of colour reproduction, a charge will be made of £300 for one colour figure, and £600 for two or more (up to a maximum of four figures). There are no page charges for Proceedings B. Exemption from charges for colour illustrations will only be made if referees decide colour is essential and if authors make an explicit case to the Editor explaining why they are unable to obtain the necessary funds.

Duplicate figures (e.g. Xerox or photographic copies, as appropriate) should be supplied with each copy. The author’s name and the number of the figure should be written on the back of all illustrations. Figures should be numbered in one sequence throughout the paper.

The position of each illustration should be clearly marked in the margin of the typescript.

Line drawings

If possible, authors should supply one set of unlabelled, original line drawings in addition to a set of labelled original drawings. Any labelling necessary for the understanding of a figure should be applied directly on the original drawings before duplicate copies are taken. All lettering should be in lower case except for the initial capital letters of proper names or where capitals are essential, e.g. for chemical abbreviations. Times or a close equivalent font should be used. The height of capital letters after reduction should be as close to 2 mm as possible. When in doubt use smaller rather than larger lettering.

Legends

These should be typed with double spacing on a separate sheet at the end of the paper. Figure legends should follow the style given below:

Figure 7. Time-course of changes in fibre type composition during post-stimulation recovery. (a) Type 1 fibres. (b) Type 2A fibres, including the transitional fibres (asterisks) referred to in the text. (c) Type 2B fibres. Bands indicate the range (mean ± s.d.) for the corresponding fibre type in control muscles.

Photographs

When it is essential to include photographs they should make the most efficient use of the space required. The area covered by the photographs should be restricted to the subject in question, or to a minimum representative area in photomicrographs, etc. This enables the photograph to be reproduced at the largest possible scale. The text area available in Proceedings B is 255 mm × 167 mm. Photographs will be printed with the text, not on plates.

Authors should supply lettered glossy prints marked on the back with the authors’ names, the number of the figure and with the top and bottom indicated. If a single figure contains multiple prints, these should be mounted (ideally on flexible card). Each micrograph must include a scale bar, applied directly to the original, with an indication of the exact length.

9. TABLES

Tables, however small, should be numbered in arabic numerals and referred to in the text by their numbers. The position of each table should be clearly marked in the margin of the typescript.

Table headings should be a brief title only; descriptions of experimental detail should follow, starting on a new line, in parentheses. Column headings should be in lower-case lettering except for the capital initial letters of proper names. The units of measurement and any numerical factors should be placed unambiguously at the head of the column, e.g. F/MHz, 10⁻⁶σ/m² or q/(kJ mol⁻¹).

10. REFERENCES

References to the literature cited must be given in double-spaced typing, in alphabetical order at the end of the paper. They should be prepared following the style of recent issues of Proceedings B.

Reference citations in the text are made by the name and year method; references by number are not permitted.

11. PROOFS

On acceptance of a paper, the Society’s Editorial Office will inform authors when they may expect to receive proofs for checking. Because of the need for fast publication, only a few days may be available for checking proofs, so authors who may be absent from their normal address must either inform the Society of their intended whereabouts or make other arrangements for the proofs to be checked quickly. Proof corrections may be returned by fax (the number is 0171-976 1837).

Authors are liable for the cost of excessive alterations to their proofs.

12. OFFPRINTS

Fifty offprints of each paper will be supplied free of charge; further copies may be ordered at extra cost at proof stage.

13. COPYRIGHTS

In order to give the Royal Society authority to deal with matters of copyright, authors will be asked to assign to the Society the copyright in any article published in the journal. In assigning copyright, authors will not be forfeiting the right to use their original material elsewhere subsequently. This may be done without seeking permission and subject only to normal acknowledgement to the journal. However, it would be appreciated if authors would inform the Society in this event.

[September 1995]
FUTURE PAPERS IN PHILOSOPHICAL TRANSACTIONS SERIES B

Philosophical Transactions: series B publishes original papers in all aspects of the biological sciences, including clinical science. Papers up to 25,000 words long are welcomed, particularly those of an interdisciplinary or multidisciplinary nature. Longer papers and reviews are also invited; authors intending to submit these should consult with the Editor at an early stage in preparation. Papers will be published rapidly (normally within six months of receipt).

Two issues of the journal will be published in September. The second will include the papers listed below.

J. R. G. Turner & M. P. Speed
Learning and forgetting in mimicry. I. Simulations of laboratory experiments

D. C. Samuels, H. G. E. Hentschel & A. Fine
The origin of neuronal polarization: a model of axon formation

T. R. E. Southwood
The Croonian Lecture 1995. Natural communities: structure and dynamics

D. P. Knight, X. W. Hu, L. J. Gathercole, M. Rusaouén-Innocent, M.-W. Ho & R. Newton
Molecular orientations in an extruded collagenous composite, the marginal rib of the egg capsule of the dogfish Scylliolus canicula; a novel lyotropic liquid crystalline arrangement and how it is defined in the spimeret

A. Williams, S. J. Carlson, C. H. C. Brunton, L. E. Holmer & L. Popov
A supra-ordinal classification of the Brachipoda

T. C. Whitmore & N. D. Brown
Dipterocarp seedling growth in rain forest canopy gaps during six and a half years

H. Xianguang, D. J. Siveter, M. Williams, D. Walossek & J. Bergström
Appendages of the arthropod Kunmingella from the early Cambrian of China: its bearing on the systematic position of the Bradoriida and the fossil record of the Ostracoda
FUTURE PAPERS IN PHILOSOPHICAL TRANSACTIONS SERIES B

Philosophical Transactions: series B publishes original papers in all aspects of the biological sciences, including clinical science. Papers up to 25 000 words long are welcomed, particularly those of an interdisciplinary or multidisciplinary nature. Longer papers and reviews are also invited; authors intending to submit these should consult with the Editor at an early stage in preparation. Papers will be published rapidly (normally within six months of receipt).

Two issues of the journal will be published in September. The first will be the proceedings of the Royal Society's Discussion Meeting on Plant life histories: ecological correlates and phylogenetic constraints, held on 21 and 22 February 1996, and will include the papers listed below.

J. Silvertown & M. Dodd
Comparing plants and connecting traits

M. J. Crawley, P. H. Harvey & A. Purvis
Comparative ecology of the native and alien florae of the British Isles

M. J. Donoghue & D. A. Ackerly
Phylogenetic uncertainties and sensitivity analyses in comparative biology

C. K. Kelly
Ecological correlates of plant range size: taxonomies and phylogenies in the study of plant commonness and rarity in Great Britain

S. C. H. Barrett, L. D. Harder & A. C. Worley
The comparative biology of pollination and mating in flowering plants

J. L. Hamrick & M. J. W. Godt
Effects of life history traits on genetic diversity in plant species

M. Westoby, M. Leishmann & J. Lord
Comparative ecology of seed size and dispersal

M. Rees
Evolutionary ecology of seed dormancy and seed size

J. M. van Groenendael, L. Klimes, J. Klimesova & R. H. Hendriks
Comparative ecology of clonal plants

M. Franco & J. Silvertown
Life history variation in plants: an exploration of the fast–slow continuum hypothesis

D. E. Goldberg
Competitive ability: definitions, contingency and correlated traits

D. J. Futuyma & C. Mitter
Insect–plant interactions: the evolution of component communities

A. H. Fitter & B. Moyersoen
Evolutionary trends in root–microbe symbioses

D. J. Schoen, M. T. Morgan & T. Bataillon
How does self-pollination evolve? Inferences from floral ecology and molecular genetic variation

D. L. Venables
Packaging and provisioning in plant reproduction

R. M. Sibly
Life history evolution in heterogeneous environments: a review of theory
FUTURE PAPERS IN PROCEEDINGS SERIES B

Proceedings: series B publishes original papers in all aspects of the biological sciences, including those of an interdisciplinary or multidisciplinary nature. Papers up to 4000 words long are welcomed, particularly announcements of important new developments in biology. Reviews containing original and interesting ideas, and criticisms of papers already published, are also invited. Papers will be published rapidly (normally within three months of receipt.)

Future issues of the journal will include the papers listed below.

Gomendio, M. & Cassinello, J.
Adaptive variation in litter size and sex ratio at birth in a sexually dimorphic ungulate
Payne, R. J. H. & Pagel, M.
When is false modesty a false economy? An optimality model of escalating signals
Karr, P., Jokela, J., Helle, T. & Kojola, I.
Direct and correlative phenotypic selection on life-history traits in three pre-industrial human populations
Stone, L., Landan, G. & May, R.
Detecting Time’s Arrow: a method for identifying nonlinearity and deterministic chaos in time-series data
Meagher, T. R. & Costich, D. E.
Nuclear DNA content and floral evolution in Silene latifolia
Beaumont, M. A. & Nichols, R. A.
Evaluating loci for use in the genetic analysis of population structure
Kokko, H. & Lindström, J.
Evolution of female preference for old mates
Johnstone, R. A.
Begging signals and the resolution of parent–offspring conflict
Kullberg, C., Fransson, T. & Jakobsson, S.
Impaired predator evasion in fat blackcaps (Sylvia atricapilla)
Mechanisms of wavelength tuning in the rod opsins of deep-sea fishes
Kawecki, T. J.
Sympatric speciation driven by beneficial mutations

Cover picture from a forthcoming paper by G. Stone.
Inflorescences of Acacia drepanolobium.
Proceedings of the Royal Society of London

Series B  Volume 263  Number 1374  22 September 1996

Contents

1. BARBER & E. A. HUNTINGDON
Parasitic infection alters schooling behaviour: deviant positioning of helminth-infected minnows in conspecific groups

M. S. Y. LEE
Stability in meaning and content of taxon names: an evaluation of crown clade definitions

R. A. WELF
A theoretical link between lenticular absorbance and fluorescence

C. H. S. HASSAN, O. BORNSTAD & T. NATO
A gradient from stable to cyclic populations of Cladocercus infuscatus in Hokkaido, Japan

Sexual selection in seaweed fish: genetic variation in male size and its reliability as an indicator in natural populations

T. KIHLMÅRCK & M. DOBBELI
Spatial evolutionary game theory: Hawks and Doves revisited

B. ERHANSEN, A. JOHANSSON, T. JONSSON & U. WLODAK
Evolution of stable population dynamics through natural selection

G. D. RUTHERFORD & M. DOBBELI
Spatial self-organization and persistence of transients in a metapopulation model

B. DOBBELI & S. V. VELLE
Functional significance of the coocoon in two arctic Gyraulus moth species

D. W. DUNES & R. R. REINZ
First record of a basal synapсид (‘mammal-like reptile’) in Gondwana

G. R. BOROTTOFF, J. J. NEGRO, J. L. TEIXEIRA, T. A. MARQUET & D. M. BIRD
Sexual dichromatism in birds independent of diet, parasites and androgens

G. GUNNARSSON & A. ANDERSSON
Sex ratio variation in short-web spiders: options for female control?

P. MACHAJ, N. R. MEGADE & D. C. HOLLIDAY
Male jniches selectively pair with fecund females

E. R. Bershadi, E. J. A. CUNNINGHAM & K. M. CHENG
The insemination window provides a distorted view of sperm competition in birds

Y. CASTAGNET & P. G. B. CLARK
Anatomical evidence of avian eggshell thickness and its function in antipredators

J. POTTER & S. MUNNO
Decreased levels of blood trypanosomoid infection correlate with female expression of a male secondary sexual trait: implications for sexual selection

P. J. HALE, J. WANG & G. P. NOLAN
Phenotypic segregation of Aedes aegypti for immune antibacterial activity and resistance to tetracyclines

M. PERNER, B. BAI & B. STRAIGHT
Isolation by distance in a population of small land snail Terebratula exilis: evidence from direct and indirect methods

P. ROSHLIN, C. DEL SEPTI, P. CROCHER & P. PENT
Pheromone false: evidence against reliance on magnetic information picked up en route to release sites

L. M. VANO, A. COX & A. COOPER
Impairment of the perception of second order motion but not first order motion in a patient with unilateral focal brain damage

S. PIASECKI, J. E. COFFEY & J. BIRCHAM
Energetic constraints and mate mate securing tactics in the damselfly Calopteryx splendens similis (Charpentier)

L. A. HANSSON
Behavioural response in plants: adjustment in algal recruitment induced by herbivores

K. MARKS, G. LIEKE & J. BIRCHAM
Female chondrosomes in cockerel ejaculates

R. GRIFFITH, S. DAVIES & C. DAVIES
Sex identification in birds using two CHD genes

K. VAHID & E. S. GILBERT
Differences across taxa in nuptial gift size correlate with differences in sperm number and ejaculate volume in bush crickets (Orthoptera: Tetrigomorphae)