

The Journal of Zoo and Aquarium Research is an initiative of EAZA, the European Association of Zoos and Aquaria. EAZA represents and links over 370 institutions and organisations in 44 countries throughout Europe and the Middle East. Formed in 1992, EAZA's mission is to facilitate cooperation within the European zoo and aquarium community towards the goals of education, research and conservation.

Aims and scope

The *Journal of Zoo and Aquarium Research* (JZAR) provides a forum for publication of novel, peer-reviewed research papers, reviews, technical reports and evidence-based case studies. Through their living collections, zoos and aquaria are uniquely placed to contribute to conservation-related research. Research categories covered by JZAR include studies in pure and applied biological sciences (e.g. behaviour, genetics, medicine, nutrition, population management and reproduction), in situ conservation research (e.g. socio-economic and field surveys) and research aimed at developing other roles of zoos and aquaria (e.g. visitor learning and marketing surveys).

A section of JZAR is devoted to submissions of original, previously unpublished, case studies documenting the effects of a husbandry intervention. Evidence-based husbandry for living collections aims to apply the best available evidence gained from the scientific method to decision making. Sharing knowledge about the effects of management and/or husbandry interventions will improve global management of living collections. The vision is that the assessment and dissemination of the effectiveness of husbandry actions will become a routine part of zoological management practice.

The core activities at the root of any evidence-based practice can be identified as:

- a questioning approach, leading to scientific experimentation;
- meticulous observation, enumeration and analysis, replacing anecdotal description;
- recording and cataloguing evidence for systematic retrieval.

Please be aware that we are reluctant to consider single case studies or case reports in veterinary medicine for publication in JZAR. If you nevertheless think your manuscript will be a valuable contribution to JZAR, please contact the Editors to discuss your options.

Publication schedule

JZAR will be published quarterly. JZAR encourages authors to revise rapidly once a paper has been submitted and deemed acceptable.

Submission guidelines

Manuscripts should be submitted via the online submission module (after registering and log in at www.jzar.org). Submission of a manuscript will be taken to imply that the material is original and that no similar paper is being, or will be, submitted elsewhere, either in whole or substantial part (this excludes oral presentations, in-house reports or abstract publications). Serialised studies should not be submitted and titles should not contain part numbers. The Editors reserve the right to accelerate the publication of high-profile papers, commissioned reviews or topical papers. Authors may suggest up to four referees for their paper; however the Editor reserves the right to choose referees other than those suggested. The type of submission (see below) should be clearly stated.

Types of paper

The following submission types will be considered:

- **Original research papers:** limited to 5000 words, excluding references, tables and figures.
- **Review articles:** limited to 5000 words and a maximum of 80 references, 70% of which should be no older than five years. Reviews

should provide a succinct analysis of the subject and can include quantitative meta-analysis, syntheses and modelling approaches, and critical evaluation. Prospects for future research directions should be described. Extensive literature reviews will not be considered. Prospective authors should submit a 300-word abstract, a list of up to 20 key references, and a cover letter outlining why the review they propose is novel, important and timely, to the Editor (editor@jzar.org), who will supply guidelines on manuscript preparation if the proposal is accepted. The submission of completed manuscripts without prior consultation with the Editor is strongly discouraged. Authors should note that all articles in JZAR are peer-reviewed and publication cannot be guaranteed.

- **Evidenced-based practice:** limited to 3000 words, excluding references and figures, but we welcome much shorter articles. Papers must include a zoo/aquarium practice intervention with appropriate monitoring to evaluate the consequences of the intervention. Please do not use terms such as 'success' as this is subjective. Papers must be written by, or in partnership with, those who carried out the intervention; we do not accept commentaries on work carried out by others. Papers should be succinct, ideally giving details of a single management action and its consequences. Please distinguish clearly between speculation and fact. We are interested in what was done and what happened rather than extensive thoughts as to what works.

Manuscript preparation

Papers should not exceed the word limits detailed above. All pages should be numbered consecutively, including those containing acknowledgements, references, tables and figures etc. Lines must be numbered consecutively throughout the manuscript. At the submission stage, figures may be embedded in the text file. However, figures for accepted manuscripts must be submitted as separate high quality files (JPEG, TIFF, etc.), or as Excel files. Typescripts must be in British English. The Editors reserve the right to modify accepted manuscripts that do not conform to scientific, technical, stylistic or grammatical standards, and these minor alterations may not be seen by the authors until the proof stage. The metric system must be used and SI units where appropriate. For further details see Baron, D.N. (1988). *Units, Symbols and Abbreviations*. 5th edition. London: Royal Society of Medicine Series. Whole numbers one to nine should be spelled out and number 10 onwards given in numerals. Full binomial taxon names should be given on the first occasion an organism is mentioned (and abbreviated thereafter), except at the beginning of a sentence. Avoid footnotes except to add information below the body of a table. Do not use initial capitals for the common names of organisms unless derived from a proper noun.

Content – original research papers

The typescript should follow the conventional form and must include:

- 1) Title page giving a concise title, followed by a list of authors' names and the institutions where the work was carried out. The name, address and e-mail address of the corresponding author should also be given. A short title for page headings must be provided (maximum eight words).
- 2) Keywords: a maximum of eight keywords may be suggested.

- 3) The Introduction should not provide a review of the area of work but should introduce the reader to the aims and context for the work described.
- 4) Materials and Methods should be sufficient to allow the work to be replicated, but should not repeat information described fully elsewhere.
- 5) Results should be restricted to a factual account of the findings obtained and the text must not duplicate information given in Tables and Figures.
- 6) The Discussion should point out the significance of the results in relation to the reasons for undertaking the research.

Content – evidence-based practice

- 1) Title page giving a concise title, followed by a list of authors' names and the institutions where the work was carried out. The name, address and email address of the corresponding author should also be given. A short title for page headings must be provided (maximum eight words).
- 2) Abstract of not more than 250 words which should summarise the main findings of the study. The abstract should also explain the importance of the paper in a way that is accessible to non-specialists.
- 3) Background: Gives a brief history of the reason for undertaking the intervention, explain the problem and the focus of your management. There is no need for an extensive literature review.
- 4) Action: Briefly describes the study situation, including typical management used. Please give full details (with exact dates if possible) of what you did, and when and how the monitoring was undertaken. Be as precise as possible so that others can follow your actions or adapt to fit their needs. Please describe anything unusual that may have influenced the outcome of the management. By providing this information, if there are differences in responses across similar interventions reported in different studies, then it is possible to start considering why. A breakdown of the time taken and cost incurred would be useful.
- 5) Consequences: This is the results section that describes what happened. Please give full details, including any problems encountered.

References

Accuracy of references is the responsibility of the author(s). References must be checked against the text to ensure (a) that the spelling of authors' names and the dates given are consistent and (b) that all authors quoted in the text (in date order if more than one) are given in the reference list and vice versa.

In the text, references must be arranged chronologically with the surname(s) of the author(s) followed by the date (e.g. Pullen 2004b). Use a, b, etc. after the year to distinguish papers published by the same author(s) in the same year. For two authors, use both names and the year. Do not use *et al.* for more than two authors, give the name of the first author followed by *et al.* and the date.

In the list, references must be arranged first alphabetically under author(s) name(s) and then in chronological order if several papers by the same author(s) are cited.

Examples

Pullen K. (2004a) The EEP studbook for the white-faced saki monkey (*Pithecia pithecia*): a tool for interpreting minimum standards of welfare in zoological parks. *Folia Primatologica* 75 (supplement): 374.

Pullen K. (2004b) Enclosure use and dyadic interactions of a bachelor group of western lowland gorillas (*Gorilla gorilla gorilla*). *Folia Primatologica* 75: 50–55.

Steinmetz H.W., Zimmermann N. (2011) Computed Tomography for the diagnosis of sinusitis and air sacculitis in orangutans. In: Fowler, M.E. and

Miller, E. (eds). *Zoo and Wild Animal Medicine: Current Therapy* Vol. VII. St. Louis, Missouri: Elsevier Saunders, 422–430.

Zimmermann A., Hatchwell M., Dickie L., West C.D. (eds) (2007) *Zoos in the 21st Century: Catalysts for Conservation?* Cambridge, UK: Cambridge University Press.

Publication ethics

Authors must be aware of, and adhere to, all laws, treaties and regulations currently applying to their work, experimental work must comply with the standards and procedures laid down by relevant national and international legislation.

Research on animals should conform to relevant guidelines e.g. the Guidelines for the Treatment of Animals in Behavioural Research and Teaching published by the Association for the Study of Animal Behaviour (<http://asab.nottingham.ac.uk/downloads/guidelines2006.pdf>). Any experimentation in which animals are subjected to painful or harmful conditions must be justified, and a statement as to an Animal Ethics Committee's approval should be included in the cover letter that accompanies the submission. Authors must demonstrate in their papers that the knowledge gained was of sufficient value to warrant such treatment. Questionable manuscripts where the Editors believe the animals were subjected to significant pain, distress or harm will not be published in the journal. Research on human subjects should conform to the Code of Ethics and Conduct of the British Psychological Society (www.bps.org.uk).

JZAR subscribes to the principles of the Committee on Publication Ethics. All co-authors of a paper should have made significant scientific contributions to the work reported, and should share responsibility and accountability for the results. The submitting author should have sent each living co-author a final draft copy of the manuscript and should have obtained the co-author's assent to co-authorship.

Conflict of interest

Authors must declare details of any potential conflict of interest. A conflict of interest exists when professional judgement concerning a primary interest (such as animal welfare or the validity of research) may be influenced by secondary interests (personal matters such as financial gain, personal relationships or professional rivalry).

Decisions and invitations to revise

All submissions are subject to peer review. If a revision is requested, the corresponding author should submit the revised manuscript within two months unless there are special reasons for a delay, agreed in advance with the Editor. Papers not received within two months may be treated as new submissions and sent for further evaluation by new referees.

Proofs

When proofs are ready, the corresponding author will receive an email. The corresponding author must provide a reliable email address and inform the Managing Editor of any extended period when the email address is not effective. Instructions for returning the proofs will be sent with the proof. The Editors reserve the right to correct the proof themselves, using the accepted version of the typescript, if the author's corrections are overdue and the journal would otherwise be delayed.

Communication via email and the JZAR website

As with many journals much of our communication with authors is supported through automated online services and sometimes personal email accounts view these as SPAM. If you have submitted a manuscript and are communicating with the editors through the JZAR website, please take note that emails originating from the Editors may end up in your junk mail folder.