The *African Journal of Tropical Hydrobiology and Fisheries* accepts papers on any aspect of hydrobiology or fisheries with relevance to Africa. These could include topics such as: fish and fisheries, freshwater and marine biology, limnology, parasitology, fisheries economics and social sciences, fish processing, aquatic weeds, rural fisheries development, fishing gear technology, aquaculture, and other fields in the aquatic sciences. In addition to full-length papers, short notes, conference reviews and book reviews will also be accepted. Taxonomic descriptions will not be accepted.

Papers submitted to the journal will be reviewed by independent referees and will be published in electronic format as soon as they have been accepted for publication. Each volume will be complete once sufficient papers have been assembled and printed copies will be available at cost on request.

**Editor:** OC. Mkumbo

**Published by:** Lake Victoria Fisheries Organisation  
P.O. Box 1625  
Jinja, Uganda  

Telephone: +256-434-125000  
Fax: +256-434-123123  
E-mail: lvfo-sec@lvfo.org
GUIDELINES FOR AUTHORS

Submission of manuscripts

All manuscripts must be original work that has not been published or submitted for publication elsewhere. Manuscripts may be in English or French, but French manuscripts should be provided with an Abstract in English. Electronic submission, in MS-Word or a programme compatible with it (pdf is not acceptable) is preferred, and submissions should be sent to the Editor at lvfo-sec@lvfo.org. For authors unable to submit electronic copies, typed manuscripts (3 copies) can be sent to the Editor, Lake Victoria Fisheries Organisation, and P.O. Box 1625, Jinja, Uganda.

Page layout and format

Manuscripts should be submitted on A4 size (check ‘page size’ on the computer) with 2.5 cm margins all round. Printed manuscripts should be double-spaced but electronic manuscripts may be single-spaced. The manuscript should then be arranged in the following sequence; Title page, Abstract, Key words, Introduction, Methods, Results, Discussion, Acknowledgments, References, with figures and tables on separate pages after the text. The Results and Discussion may be combined in short communications, and review papers may use other formats. Excessive subheadings should be avoided and sections should not be subdivided beyond three levels; the decimal system of numbering should not be used. All pages should be numbered but footnotes, headers and footers must not be used.

Scientific names of organisms should include the authority (but not the date) when first mentioned and authors should take note of the different conventions employed by botanists and zoologists. Plant names should therefore be written as *Eichhornia crassipes* (Mart.) Solms, while animal names are given as *Protopterus annectens* Owen or *Limnothrissa miodon* (Boulenger), depending on whether or not the original generic name is being used. Generic names should be abbreviated on second and subsequent use, e.g. *E. crassipes*, *P. annectens*.

Title page

The title page should include the title, the name(s) and address(es) of the author(s) and the e-mail address of the corresponding author. The author’s address should always be the one where he/she was when the work was done; if it has changed since then the new address should be indicated as well.

Abstract

Each paper should have an abstract not exceeding 150 words, which should summarise the significant findings of the paper. Note that abstracts do not have paragraphs and should not contain references. The abstract should be followed by up to six key words.

Introduction

The Introduction should briefly review the state of knowledge about the topic of the paper, citing the most appropriate and recent literature. It should not be used as a thesis-type literature review and excessive literature citations should be avoided. The research questions should be clearly set out with some indication of how the investigation being described would be expected to add to existing knowledge.

Methods

The methods used should be clearly set out so that readers can fully understand what was done, and it is essential that authors include the dates of field sampling; there is already a considerable amount of historical data in the literature which cannot be used because it is undated.
Standard methods, e.g. for chemical analyses, need not be described in detail provided a standard literature citation is included. It is not necessary to describe standard statistical methods but unusual or little-used methods should be accompanied by a literature citation.

**Results**

The results of the work should be presented as clearly and concisely as possible and authors should ensure that the results obtained from all the methods are given; for example, one frequently sees statements like “... all fish were measured to total and standard length and weighed...” only to find that one or two of these measurements are omitted from the Results. All measurements should be given in metric units (non-metric units should include the metric equivalent) in accordance with the System International d’Unites (SI) e.g. mm, m², kg ha⁻¹ and so on, using the superscript rather than the solidus (/). The 24-hour clock should be used for the time of day, e.g. 1645 hours not 4.45 pm, while calendar dates should be given as 18 April 1996. In the text, single-digit numbers should be written in full, except when used with units of measure, e.g. five boxes, 10 g, 5-cm size classes. Numerals should be used for numbers with two or more digits, e.g. 34 samples, 2.5 hours.

Statistics should be presented as follows: name of test, number of observations or degrees of freedom, and probability level. Probability must be expressed in standard statistical format, i.e. \( p > 0.05 \) (= not significant), \( p < 0.05 \) (= significant), \( p < 0.01 \) (= highly significant) and \( p < 0.001 \) (= very highly significant).

**Discussion**

The Discussion should outline the significance of the results and how they contribute to knowledge and understanding of the topic, and whether or not the research questions were answered. Speculation should be avoided and conclusive statements should be supported by data or appropriate literature citations. Authors should resist the temptation to write a second literature review in the Discussion and should avoid making general statements about the topic that do not relate specifically to the Results.

As a rule, paragraphs headed “Summary”, “Conclusions”, or “Conclusions and Recommendations” should be avoided. These tend to repeat things that have, or should have been, included in the Discussion and usually contribute very little to the paper. They may be used in review papers that might follow the standard format suggested here for most other papers..

**Acknowledgements**

These should be brief and limited to those who actually made it possible to do the work being reported (include sources of funding).

**References**

Authors are responsible for the accuracy of their references and these should be carefully checked before submission. References should be listed as follows:

1. **Papers:**
   [Journal titles should be given in full and part numbers should not be included unless each part begins with page one.]

2. **Books:**
   [Publisher and place of publication should always be given; include the country if the town is not well known, e.g. “Science Publishers, Enfield, New Hampshire, USA”.]
3. **Book Chapters:**

[Editor(s), publisher, place of publication and page numbers must always be included]

4. **Conference proceedings:**

[Include editor(s) if these are named]

5. **Unpublished documents:**
These should be avoided as far as possible since they are generally not reviewed, produced in limited numbers, have a restricted distribution and are difficult to locate. If they must be cited then as much information as possible should be given, including page numbers. Note that university theses are also unpublished documents and should also be avoided as far as possible.

References should be listed in alphabetical order and then chronologically when more than one reference by the same author is cited. When more than one paper by the same author in the same year is cited, then the citations should be qualified by a letter, e.g. Darwin (1996a; 1996b). These should be cited in the order in which they appear in the text, i.e the first citation is 1996a, the second 1996b, and so on. References with multiple authors, but the same first author, should be cited alphabetically according to the second author, e.g. Watson, Crick and Darwin (1995) would precede Watson, Darwin and Crick (1993).

**Tables and Figures**
These must not be embedded into the text but given on separate pages with each table or figure on a separate page.

**Tables**
Authors should examine a current issue of the journal for the style of tables. Each table should be numbered in the sequence in which they appear in the text and have a legend above; this should be fully explanatory so that the reader can understand the table without having to read the text. Explanatory footnotes can be included and indicated by superscript letters; do not use the footnote function on the computer but type the footnote at the bottom of the table.

Tables should not be inserted into the text as objects and authors should use the table template function directly in the text or copy and paste from Excel. For tables with text it may be necessary to place more than one sentence in a cell but this must be avoided with numbers; no cell should have more than one. All numbers should be formatted to the right or centred, and not to the left which in MS-Word is the default setting.

Authors should ensure that all data are given to a constant degree of precision. For example, the default in Excel is to omit the decimal point in whole numbers and this is often carried over into tables copied from Excel; this can be avoided by setting the desired number of decimal places. It should be remembered that a value of “30.0” has a greater degree of precision than a value of “30.”

**Figures**
Authors should check a recent issue of the journal for the style of figures. Each figure should be numbered in the order in which it is presented in the text and have a caption below; this
should be fully explanatory and enable the reader to understand what is shown in the figure without resorting to the text.

Authors should note some common problems with Excel, the most widely-used graphics programme, and should not rely on the default settings. In particular:

(a) Check the proportions of the figure to ensure that axes are the appropriate length;
(b) Delete the horizontal grid lines and remove the coloured background;
(c) Do not use the default colours for lines and symbols as they are usually too faint and too small;
(d) Points and lines must be clearly visible after reduction;
(e) Ensure that lettering on axes is large enough to be visible on reduction; do not use ‘bold’ font;
(f) Do not include a title in the figure and do not enclose it in a box.

The scale on maps and microphotographs should be indicated by a scale bar; scales such as “1:50,000” or “magnification x100” will change if the map or figure is reduced. Photographs can be scanned but authors should remember that “jpeg” and other image files can be very large and it may be necessary to convert them to “pdf” format, at least for editing purposes. Colour photographs can be used in the final electronic version of the paper, but may be in monochrome in printed versions; authors should consult the Editor if they want printed versions to be in colour and may have to bear the costs.
TABLE OF CONTENTS

VOLUME 12
2009

Papers presented at the Lake Victoria Stakeholder’s Conference
Kampala, 27-30 October 2008

1 Foreword
D. Nyeko  PDF

2-8 Rents drain in fisheries: the case of the Lake Victoria Nile perch fishery
R. Arnason  PDF

9-14 Managing Nile perch using slot size; is it possible?
M. Njiru, A. Getabu, A.M. Taabu, E. Mlaponi, L. Muhoozi, O.C. Mkumbo  PDF

15-21 Status of the major commercial fish stocks and proposed species-specific management plans for
Lake Victoria
R. Kayanda, A.M. Taabu, R. Tumwebaze, L. Muhoozi, T. Jembe, E. Mlaponi, P. Nzungi  PDF

22-30 Lake Victoria’s water budget and the potential effects of climate change in the 21st century.
S.M. Sewagudde  PDF

31-36 Climate change and fishery sustainability in Lake Victoria
J.L. Johnson  PDF

37-46 Re-configuring poverty; the wickedness perspective
P. Onyango  PDF

47-51 The contribution of Lake Victoria fisheries to national economies
K.O. Odongkara, R.O. Abila, J. Luomba  PDF

52-58 Implementing co-management of Lake Victoria’s fisheries: achievements and challenges
V.O. Ogwang, J.I. Nyeko, R. Mbilingi  PDF

59-66 Gender integration in the management of the Lake Victoria fisheries
C. Lwenya, B. Mbilingi, J. Luomba, E. Yongo  PDF

67-73 Management of fishing capacity in the Nile perch fishery of Lake Victoria

74-77 Aquaculture for increased fish production in East Africa
J. Rutasaire, H. Charo-Karisa, A.P. Shoko, B. Nyandat  PDF

78-82 The present status of the hook fishery and its impact on the fish stocks of Lake Victoria
D. Chitamwebwa, J. Kamanyi, J. Kayungi, H. Nabbongo, A. Ogolla, J. Ojuok  PDF
Foreword

The African Journal of Tropical Hydrobiology and Fisheries was first published in 1971 by what was then the East African Freshwater Fisheries Organisation in Jinja, Uganda. Over the years since then, it has experienced many difficulties, some as a result of political and economic events in East Africa, and only the first four volumes were published up to 1975. It appeared again, now under the aegis of the Ugandan Fisheries Research Institute, which had succeeded the East African Freshwater Fisheries Organisation, with Volume 5 being published two decades later in 1994. It was transferred to the Lake Victoria Fisheries Organisation in 1998 who published it until 2003, with Volume 11 being the most recent. Delays in publishing since then have resulted from the problems in assembling enough material of a sufficiently high standard to enable a complete volume to be printed. These delays affected continuity and discouraged authors from submitting papers with the result that many papers that should have been published in this journal went elsewhere.

In order to deal with this problem, the decision was taken to publish the journal as an open-access electronic journal with papers being published on the website as soon as they have been accepted. This will greatly increase their international exposure and raise the profile of the journal. This, in turn, should encourage potential authors to submit work of a higher quality and allow the journal to take its rightful place as one of Africa’s leading scholarly publications.

Back in 1971 the first issue of the journal stated that it would accept ‘... original and well supported ideas on techniques, methodology and research findings from scientists, fishery officers, fishery economists and sociologists. The journal will therefore strengthen the African research scientist by making research material available and also [by] increasing the awareness and utility of aquatic resources.” These objectives are as valid now as they were then and we hope that the “new” African Journal of Tropical Hydrobiology and Fisheries will do just this.

The Lake Victoria Stakeholder’s Conference, Kampala, October 2008

Lake Victoria, Africa’s largest lake, supports one of the world’s largest inland fisheries yielding almost one million tonnes per annum. More than one million people depend directly on the fishery, with perhaps the same number depending on it less directly through ancillary activities such as fish trading, boat building, and so on. In addition, the export fishery based on the Nile perch Lates niloticus (L.) makes a substantial contribution to the economies of Kenya, Tanzania and Uganda.

The lake and its fisheries face a number of problems, however, many of which are common to other African lakes. The introduction of Nile perch drastically changed its ecosystems thereby focussing attention on the problem of alien species and how to balance their potential benefits against their ecological costs. One of these ecological costs may have been the revelation that the lake had become eutrophic; this began in the 1960s but only became obvious much later. This has raised the issue of population growth and environmental degradation in the lake basin as a whole and the possible effects this might have on fisheries productivity. Other issues, such as climate change will also need to be considered.

There is increasing evidence of overfishing in the lake and innovative steps have been taken to introduce systems of co-management that involve the fishing communities in management decisions. This is important because it reminds scientists and administrators that fisheries involve people and it is impossible to manage a fishery without understanding the social and economic consequences of management decisions.

For this reason, the Lake Victoria Fisheries Organisation, with financial assistance from the European Union and the German Technical Cooperation (GTZ), organised a major Lake Victoria Stakeholder’s Conference in Kampala in October 2008. Many of these issues were discussed at that conference and it was decided to publish some of these papers in the inaugural volume of the “new-look” African Journal of Tropical Hydrobiology and Fisheries since they discuss issues of relevance across the continent.

We hope readers will find these papers of interest and that this will encourage them to submit their own manuscripts to the journal which is, after all, an African journal, not one concerned with Lake Victoria one.

D. NYEOKO
Executive Secretary, Lake Victoria Fisheries Organisation