

# International Journal of Recirculating Aquaculture

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## Instructions for Authors

The *International Journal of Recirculating Aquaculture* (IJRA) encourages authors to submit original research papers that present high-quality work on all aspects of recirculating aquaculture. Papers will be peer-reviewed and evaluated for scientific merit, relevance, and for their usefulness in promoting the advancement of recirculating aquaculture. Complete, coherent projects are preferred. Any related papers submitted together must be thoroughly cross-referenced.

All papers must be original, meaning that the data and the information presented must be the work of the authors, and cannot have been published elsewhere. Dual publication of a paper or data is possible only through the permission of the Editors of both journals. THERE ARE NO PAGE CHARGES for IJRA submissions.

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## **MANUSCRIPT SUBMISSION**

Manuscripts should be sent to Angela Correa, Managing Editor, *International Journal of Recirculating Aquaculture*. E-mail submission is preferred ([ijra@vt.edu](mailto:ijra@vt.edu)), but regular mail submissions are also accepted. Please send paper correspondence to:

27-D Food Science & Technology Building (0418)  
Virginia Polytechnic Institute & State University  
Blacksburg, VA 24061, USA

All manuscripts must be in English, and should be submitted both as a Microsoft Word document (.doc), and as an Adobe Acrobat document (.pdf). Mailed submissions should include the electronic files on a CD-ROM or USB 'thumb' drive. Please note that it is not possible to return media.

Each submission must include a cover letter stating that the paper contains original research and that the information has not been published elsewhere. Be sure to include the names of colleagues who have already reviewed the work presented.

IJRA has three categories for submission:

1. Articles, which are complete in-depth scientific studies;
2. Notes, which are short papers of limited scope, and
3. Book Reviews, which are summaries and opinions of recently-published aquaculture texts, 500-750 words in length.

Articles and notes will normally be critically reviewed by two or three experts, as well as by the Managing Editor. Book reviews will normally be critically reviewed by both the Executive Editor and the Managing Editor. Submissions may be returned without peer review in cases where the Managing Editor determines that they are inappropriate for the journal, of poor quality, poorly written, or fail to follow the journal's style format.

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## PREPARING the MANUSCRIPT

IJRA uses the latest editions of Webster's New International Dictionary and Webster's New Collegiate Dictionary for standard spellings and word definitions. All spellings should be in "American English." Foreign or science-related terminology that is unfamiliar and does not appear in these dictionaries will require an accompanying definition. All foreign language words should be italicized in the manuscript.

Acceptable scientific and common names of fishes are listed in *A List of Common and Scientific Names of Fishes from the United States and Canada* published by the American Fisheries Society. Scientific names should be italicized (e.g., *Antigonia aurorosea*). Common names may be used throughout each paper, but must be accompanied by a full scientific name when they first appear in a paper. The author must use the full common name, e.g., "yellow perch" not "perch."

Paper manuscripts must be submitted on paper 22 x 28 cm (8.5 x 11 inches) in size. Only one side of the paper should be used. Number each page sequentially and include the senior author's name next to the page number (e.g., Page 4, Flick) on each page. Single-space all typed material, including references. Type size in the body of the text should be no larger than Times New Roman 12pt font, and no smaller than Times New Roman 10pt font.

example: Times New Roman 12pt *Italic* **BOLD**  
Times New Roman 10pt *Italic* **BOLD**

Subsection headings should be italicized in the manuscript. Spell out one-digit numbers, except when they are used with units of measure – e.g., six ponds, 7 days. Spell out any number that begins a sentence. When two numbers occur sequentially in the text, one of the numbers must be spelled out – e.g., In 2007, fifty fish were stocked. Use commas in numbers of 1,000 or more. Use the 24-hour clock to describe time – e.g., 1300, not 1:00 p.m. Always place a zero to the left of a decimal point if the number is less than one; this includes probability values – e.g., P = 0.05, not P = .05. All units of measurement must be reported via the metric system. Parts per million or milligrams per liter can be reported as either "ppm" or "mg/l," but not as "mg.l<sup>-1</sup>."

Consult the current Edition of the ACS Style Guide (<http://portal.acs.org>) for detailed information regarding the use of standard international units (SIU) and measurements not mentioned here. Standard scientific abbreviations and symbols may be used without definition. If the use of a symbol could cause confusion, define the symbol the first time it is used.

Commonly used aquaculture jargon can be used without defining the term – e.g., fry, fingerling, hapa. Less commonly used jargon may be used, but terms should be defined the first time they are used. Jargon from fields outside of aquaculture should also be defined the first time they are used.

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## ORGANIZATION of MANUSCRIPTS

Articles and notes should include a title, names of authors and their addresses, abstract, introduction, materials and methods, results, discussion (or a combined results and discussion), conclusion (if needed), acknowledgements (if any), references, figures, and tables, in that order.

- **Title** – The title should accurately reflect the contents of the paper. Brief, concise titles are encouraged. The title page must include the name(s) of the author(s) and all titles and addresses. Use a separate page for the title page.
- **Keywords** – The author should place 5 or 6 key words within the abstract in bold text to be used for indexing.
- **Abstract** – The abstract should be a concise highlight of the results and conclusions. Methodology should not be abstracted unless it is necessary to explain the results or unless the paper describes a new technique. Abstracts should be less than 300 words. Use a separate page for the abstract.
- **Introduction** – The introduction should explain why the paper was written and why it is relevant. The introduction should condense the information or problems in the field that led the author to do the research. The introduction is not a complete literature review, and therefore only key references should be cited. The introduction should also contain a statement that describes the purpose or objective of the paper.
- **Materials and Methods** – The goal of this section is to clearly describe what was done so that others can repeat the experiment. If previously published papers described a technique that was used, citations can be used to prevent unnecessary repetition. If the technique or process was modified, the modification must be described so that others can repeat the process. Experimental designs can be explained by use of figures to help clarify what was done. If the experiment was a complicated one with many subparts, subsections may be used to describe each subpart.
- **Results** – This section describes the data. Proper use of tables and figures can simplify and help explain the results. Statistical analysis of data is necessary, unless differences are so obvious that statistical analysis is superfluous. Although probability values of 0.05 and 0.01 are traditionally used, each author is free to choose his or her own level of significance.
- **Discussion** – This section should interpret the results and compare the results from this experiment to those found in similar research. The section can also be used to speculate about the results, to provide reasons for the trends, and to suggest new ideas that can advance our understanding of aquaculture. This section should not be a

literature review.

- **Results and Discussion** -- The results and discussion sections can be combined. In most cases this leads to a better paper, because the integration of these sections leads to more meaningful interpretations of the data.
- **Conclusion** – This section should be used only when the results of an experiment lead to an unequivocal interpretation.
- **Acknowledgements** – This section should be used to thank organizations that provided monetary support for the research, as well as individuals who assisted in the research or preparation of the paper. This section includes manuscript number designations for those institutions that assign such numbers.
- **References** – Select references with great care. Unless your submission includes a literature review, there is no need to reference every paper written about a subject. Include only the most important ones.
- **Figures and Tables** – All tables and figures should follow the references. Figures go before tables. Number figures and tables to simplify referencing (e.g., Figure 1, or Figure 1a).

#### **IN-TEXT CITATIONS --**

Within the text, references are cited in one of two ways:

1. Fisher (2006) evaluated the role of laboratories. or—
2. The role of laboratories was evaluated (Mwanga 2006).

When there are three or more authors, list only the first in a citation and follow that with et al.:  
Watanabe et al. (2009) reviewed tilapia mortality statistics.

When several citations are used in a single entry, they should be listed chronologically. If you are citing two papers that were written by the same author or sets of authors, the name only has to appear once per citation, and the name is followed by the years that designate the different papers; separate the years with commas. If you are citing two authors, you must separate the citations with a semicolon: (Schenkel 1999, 2006; Rusch 2004).

If the name of an institutional author is long, it can be abbreviated in a citation, so long as the full name appears in the references (e.g., National Institute for Food and Agriculture may be abbreviated as NIFA).

In the reference section, the reference list is strictly alphabetical by last name of the first author. If an author has written more than one paper, the following format should be followed: All single-authored papers go first, followed by coauthored papers, and then the papers that were written by three or more authors. If an author has written more than one single-authored paper, the papers are listed chronologically. If an author has written more than one co-authored paper, they are listed alphabetically by the second author's last name. If a tandem has authored two or more papers, the order is chronological. Papers written by the same group of three or more authors should be listed chronologically.

## **TABLES and FIGURES –**

When creating a table, decide the purpose of the table and what points are important; then organize the table so that the main features can be easily understood. The table heading should provide sufficient information for the table to be understood as an entity. Keep footnotes to a minimum. Use the examples included with these instructions, as well as the ACS Style Guide for examples of acceptable tables. Each table goes on a separate page. Authors should endeavor to make tables fit on a single page. List any captions together with the table or figure. Although good quality photocopies of drawings or other artwork are acceptable when a manuscript is initially submitted for review, original artwork must accompany the final revised manuscript.

Graphs and original artwork must be printed with a laser printer or done in pen and ink on opaque white paper. Faint or illegible markings, or dot-matrix figures are not acceptable. Original artwork or high-contrast photographs are acceptable. Photographs should be on glossy paper. Do not glue pictures to cardboard. Color photographs will be changed to grayscale.

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## **FINAL REVISED MANUSCRIPTS**

Final manuscripts can be submitted electronically, either on disk or via e-mail, and should be submitted both as a Microsoft Word document (.doc). If necessary, one set of original artwork (drawings or photographs) can be submitted via regular mail.

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