

Submission date. 04/09/2025

Associate editor's decision after peer review (06/11/2025).

Dear Dr. Gubiani:

Manuscript ID NI-2025-0158 entitled "Length at first maturity of 42 freshwater fish species in the Itaipu Reservoir reveals strong reproductive-size relationships" which you submitted to the Neotropical Ichthyology, has been reviewed. The comments of the reviewer(s) are included at the bottom of this letter. There is a pdf file attached with the comments of one of the reviewer that you should consider in this revisions.

The reviewer(s) have recommended publication, but also suggest some revisions to your manuscript. Therefore, I invite you to respond to the reviewer(s)' comments and revise your manuscript.

To revise your manuscript, log into <https://mc04.manuscriptcentral.com/ni-scielo> and enter your Author Center, where you will find your manuscript title listed under "Manuscripts with Decisions." Under "Actions," click on "Create a Revision." Your manuscript number has been appended to denote a revision.

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You will be unable to make your revisions on the originally submitted version of the manuscript. Instead, revise your manuscript using a word processing program and save it on your computer. Please also highlight the changes to your manuscript within the document by using the track changes mode in MS Word or by using bold or colored text. Once the revised manuscript is prepared, upload BOTH versions (the tracked and a clean) and submit them through your Author Center.

When submitting your revised manuscript, you will be able to respond to the comments in the space provided. You can use this space to document any changes you make to the original manuscript. In order to expedite the processing of the revised manuscript, please reply POINT TO POINT all the suggestions of the reviewers and be as specific as possible in your response to the comments.

IMPORTANT: Your original files are available to you when you upload your revised manuscript. Please delete any redundant files before completing the submission.

Because we are trying to facilitate timely publication of manuscripts submitted to the Neotropical Ichthyology, your revised manuscript should be submitted before 06-Jan-2026. If it is not possible for you to submit your revision by this date, we may have to consider your paper as a new submission.

Once again, thank you for submitting your manuscript to the Neotropical Ichthyology and I look forward to receiving your revision.

Sincerely,

Dr. Francisco Gerson Araújo

Associate Editor, Neotropical Ichthyology

gersonufrj@gmail.com, gerson@ufrj.br

Anonymous reviewer #1

Recommendation. Minor Revision

Comments. Dear Editor,

I have carefully reviewed the manuscript and would like to provide my evaluation and constructive feedback.

General Comments

The manuscript addresses a highly relevant topic for fisheries resource management and aquatic biodiversity conservation, particularly within the context of the Itaipu Reservoir. The study provides valuable data that could contribute to understanding fish assemblage structure and its implications for management and conservation strategies. However, I have some concerns regarding the scientific robustness of the comparisons made using the FishBase database. While FishBase is a popular and easily accessible resource, it often lacks rigorous scientific validation, and some of its information may be inconsistent or outdated. For greater reliability, I recommend that the authors use alternative, more robust databases, such as the Global Biodiversity Information Facility (GBIF), which offers curated and traceable biodiversity records.

The discussion section should also be expanded and deepened, with greater emphasis on how the results can inform fisheries management and conservation strategies in the Itaipu Reservoir. This would strengthen the manuscript's applied relevance and scientific contribution.

Finally, I strongly recommend an English language revision, as several grammatical and stylistic issues currently limit its readability and overall quality.

Specific Comments

1. Lines 82–87: The objective should be clearer and more direct. As currently written, it reads more like a conclusion from an abstract rather than a presentation of research aims and questions.
2. Lines 98–102: This information belongs in the Introduction, not in the Methodology section.
3. Lines 105–106: Please explain more clearly what “defeso” means and cite the corresponding law or regulation.
4. Lines 112–114: This is a sensitive issue. If euthanasia was performed, the study must have ethical approval from an institutional committee, and the approval certificate number should be provided.
5. Lines 119–120: This sentence is confusing and should be rewritten for clarity.
6. Lines 155–156: Was the number of individuals 44,926? Individual counts should always be whole numbers. If not, it seems you are presenting CPUE data rather than absolute abundance—please clarify.
7. Lines 166–169: FishBase is often referred to as the “Wikipedia of fish,” and its data may not meet scientific rigor standards. I suggest comparing your results with other databases, such as GBIF, for a more robust and reliable analysis.
8. Lines 192–197: It would be more appropriate to compare your findings with previous studies or more solid databases, as noted above.
9. Lines 203–205: This text belongs in the Introduction, not the Discussion.
10. Figure 1: The figure lacks a scale and geographical orientation (please include a compass rose with North–South indication).

Anonymous reviewer #2

Recommendation. Major Revision

Comments. Dear author,

I have added some comments and suggestions for improvement in the manuscript. Please review them and submit the revised version.

Author's Rebuttal Letter (05/01/2026).

Toledo, Paraná, Brazil

January 5, 2026

José L. O. Birindelli, Dr.

Editor-in-Chief

Universidade Estadual de Londrina (UEL), Londrina, Paraná/PR, Brazil

Neotropical Ichthyology

We are submitting our revised manuscript entitled "Length at first maturity of 42 freshwater fish species in the Itaipu Reservoir reveals strong reproductive-size relationships", Manuscript ID NI-2025-0158 for evaluation by the Neotropical Ichthyology Editor.

We are very pleased with the positive feedback from the reviewers and that the Editor designated our paper as revisions, considering it as potentially publishable. We carefully revised our manuscript, incorporating all the referee suggestions. We believe that the main concerns pointed out by the reviewers have been resolved in this new version. We strongly believe that the present version has a substantial improvement over the previous version, although, of course, we would still be willing to consider further constructive suggestions and comments. We are very grateful for all insightful input from the reviewers.

Please find below a detailed response to each of the reviewers' comments.

We are grateful for your time and effort in handling our manuscript.

Sincerely yours,

Éder André Gubiani and Co-authors.

Editor comments:

Manuscript ID NI-2025-0158 entitled "Length at first maturity of 42 freshwater fish species in the Itaipu Reservoir reveals strong reproductive-size relationships" which you submitted to the Neotropical Ichthyology, has been reviewed. The comments of the reviewer(s) are included at the bottom of this letter. There is a pdf file attached with the comments of one of the reviewer that you should consider in this revisions.

The reviewer(s) have recommended publication, but also suggest some revisions to your manuscript. Therefore, I invite you to respond to the reviewer(s)' comments and revise your manuscript.

Once again, thank you for submitting your manuscript to the Neotropical Ichthyology and I look forward to receiving your revision.

Sincerely,

Dr. Francisco Gerson Araújo

R. Dear Dr. Francisco Gerson Araújo,

Thank you for reviewing our manuscript and considering it for publication. Also, we appreciate the reviewers' careful evaluation and their recommendation for publication, as well as the additional suggestions provided to strengthen the paper.

We have prepared a revised version of the manuscript that addresses the reviewers' comments point by point. All modifications were implemented in the manuscript, and we prepared a detailed response document specifying each change and where it can be found in the revised text. As requested, we will upload both a clean version and a tracked-changes version.

Thank you again for the opportunity to revise and resubmit our work. We look forward to your further consideration.

Sincerely,

Dr. Éder Gubiani, on behalf of all co-authors

The manuscript addresses a highly relevant topic for fisheries resource management and aquatic biodiversity conservation, particularly within the context of the Itaipu Reservoir. The study provides valuable data that could contribute to understanding fish assemblage structure and its implications for management and conservation strategies. However, I have some concerns regarding the scientific robustness of the comparisons made using the FishBase database. While FishBase is a popular and easily accessible resource, it often lacks rigorous scientific validation, and some of its information may be inconsistent or outdated. For greater reliability, I recommend that the authors use alternative, more robust databases, such as the Global Biodiversity Information Facility (GBIF), which offers curated and traceable biodiversity records.

The discussion section should also be expanded and deepened, with greater emphasis

on how the results can inform fisheries management and conservation strategies in the Itaipu Reservoir. This would strengthen the manuscript's applied relevance and scientific contribution.

Finally, I strongly recommend an English language revision, as several grammatical and stylistic issues currently limit its readability and overall quality.

R. We appreciate the reviewer's thorough evaluation and for highlighting the applied importance of our study for fisheries management and aquatic biodiversity conservation in the Itaipu Reservoir. We concur that the concerns raised are relevant, and we have addressed them in the revised manuscript. Please check below specific comments:

(i) FishBase use and reliability: We agree that FishBase can include heterogeneous, incomplete, or outdated entries for some taxa. In the revised manuscript, we clarify that FishBase is used only as a widely consulted comparative baseline in fisheries science and management, and not as a definitive source or the basis for inference. We also explicitly acknowledge its limitations and interpret FishBase comparisons as a way to document agreements and discrepancies with commonly consulted values, thereby placing this potential source of uncertainty in clear perspective. To reflect this intention, we revised both the objectives in the Introduction and the Discussion.

(ii) Discussion strengthened for management and conservation relevance: Following the reviewer's recommendation, we expanded the Discussion to more directly link our results to management in Itaipu, highlighting implications for minimum catch sizes, adaptive revisions of size regulations, and complementary measures such as gear selectivity (e.g., mesh size) and seasonal/spawning protections.

(iii) English revision: The manuscript has undergone a comprehensive English-language revision, with corrections to grammar and style and improved overall clarity and consistency.

We thank the reviewer again for these constructive suggestions, which have helped us improve the manuscript substantially. If the Editor prefers, we can further adjust the presentation (e.g., restricting comparisons to FishBase entries with traceable primary references and/or expanding the cautionary framing), while retaining FishBase for the explicit purpose described above.

Specific Comments

1. Lines 82–87: The objective should be clearer and more direct. As currently written, it reads more like a conclusion from an abstract rather than a presentation of research aims and questions.

R. Done.

2. Lines 98–102: This information belongs in the Introduction, not in the Methodology section.

R. Done. We moved this content to the Introduction and revised the text to better reflect our objectives.

3. Lines 105–106: Please explain more clearly what “defeso” means and cite the corresponding law or regulation.

R. Done. We clarified the meaning of “defeso” and added the corresponding regulation (IBAMA Normative Instruction No. 25/2009) in lines 115–120.

4. Lines 112–114: This is a sensitive issue. If euthanasia was performed, the study must have ethical approval from an institutional committee, and the approval certificate number should be provided.

R. Done. We clarified this point in the text (see lines 128–134).

5. Lines 119–120: This sentence is confusing and should be rewritten for clarity.

R. Done. We rewrote the sentence for clarity (lines 137–138).

6. Lines 155–156: Was the number of individuals 44,926? Individual counts should always be whole numbers. If not, it seems you are presenting CPUE data rather than absolute abundance—please clarify.

R. Thank you for raising this point. The value 44,926 refers to the absolute number of

individuals (raw count; n) of *Pterodoras granulosus* captured. All values in that sentence are whole-number specimen counts, not CPUE or any standardized abundance metric. To avoid ambiguity, we revised the text to explicitly state that these are raw counts (n) per species.

7. Lines 166–169: FishBase is often referred to as the “Wikipedia of fish,” and its data may not meet scientific rigor standards. I suggest comparing your results with other databases, such as GBIF, for a more robust and reliable analysis.

R. Thank you for this important point. We agree that FishBase is widely used, but its information can be heterogeneous, incomplete, or outdated for some taxa. We intentionally retained the FishBase comparison to highlight this issue: one objective of our study is to document where locally derived L50 estimates agree with, or diverge from, values commonly consulted by fish scientists and managers. We revised the objectives and Discussion to clarify that FishBase is used as contextual benchmarking rather than as the basis for inference, and that discrepancies should be interpreted cautiously (e.g., spatial variation, methodological differences, or gaps in compiled sources). If the Editor prefers, we can further adjust the presentation to better address this concern.

8. Lines 192–197: It would be more appropriate to compare your findings with previous studies or more solid databases, as noted above.

R. Addressed. Please see our response to Comment 7. We also revised the Discussion to make this rationale clearer to readers.

9. Lines 203–205: This text belongs in the Introduction, not the Discussion.

R. Thank you for this observation. We agree and moved the general background on first maturity (L50) to the Introduction (lines 63–81). The Discussion was revised to focus on interpreting our results and their management implications for the Itaipu Reservoir.

10. Figure 1: The figure lacks a scale and geographical orientation (please include a compass rose with North–South indication).

R. Figure 1 already provides geographic orientation (north arrow) and a scale bar in the top-right corner.

Associate editor's decision after peer review (21/01/2026).

Dear Dr. Gubiani:

It is a pleasure to accept your manuscript entitled "Length at first maturity of 42 freshwater fish species in the Itaipu Reservoir reveals strong reproductive-size relationships" in its current form for publication in the *Neotropical Ichthyology*.

Congratulations for the acceptance of your article, and be aware on the following topics:

1. Publication Fee

NI will charge a publication fee if none of the co-authors is an active SBI member. This measure is essential to strengthen SBI and thus ensure the continuity of our journal, scientific society, and biannual meetings. SBI is not limited to Brazilians but is open to anyone interested in freshwater and marine Neotropical fishes. More details on SBI are available at <https://www.sbi.bio.br/>. Please email tesouraria.sbi@gmail.com to confirm whether any of your co-authors is a current SBI member and to activate your SBI membership if needed. Otherwise, if you will cover the publication fee of R\$1.000, please inform us at the same email. For authors outside Brazil, the fee will be converted to US dollars based on the official exchange rate on the date of payment. The only exceptions to this fee are invited articles.

2. Science Communication and Social Media

NI actively promotes published articles to both academic colleagues and the general public, including science journalists. To support this, we create social media posts and require images and/or videos of fish related to your work. If your article does not include such images, please send a photo of a representative fish species, preferably alive in its natural habitat. If you do not have your own photo, you may provide a link to an online

image, along with the source, author, and, if applicable, authorization for its use. We also publish video summaries of articles in Portuguese on our Instagram (@neoichth). We ask you to designate one author to record a short video using a mobile phone, following the attached instructions. The video should include visual materials (photos, graphics) and a script for subtitles to enhance accessibility. Please email the completed material to neoichth@nupelia.uem.br within 30 days. For now, please provide the name and email address of the author responsible for recording the video.

Additionally, if your article is taxonomic in nature and has been submitted to Zoobank, it is your responsibility to update the manuscript's status on Zoobank once it has been published.

All of the above information and materials are mandatory for the publication of your article, including the scientific dissemination component, which is crucial in the current climate of science denial and misinformation. If you have any questions, please feel free to contact us at neoichth@nupelia.uem.br.

Please respond to this e-mail within five working days to let us know you are aware of all the important points mentioned above.

Thank you for your fine contribution. On behalf of the Editors of the Neotropical Ichthyology, we look forward to your continued contributions to the Journal.

Sincerely,

Dr. Francisco Gerson Araújo

Associate Editor, Neotropical Ichthyology
gersonufrrj@gmail.com, gerson@ufrrj.br

Neotropical Ichthyology



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