Submission date. 06/11/2025

Associate editor's decision after peer review (06/01/2026).
Dear Mr. Xavier:
Manuscript ID NI-2025-0193 entitled "Reef Fish Biophony under Tourism-Driven Sound Pollution in Northeastern Brazil" which you submitted to the Neotropical Ichthyology, has been reviewed. The comments of the reviewer(s) are included at the bottom of this letter.
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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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 08-Mar-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. Osmar Luiz
Associate Editor, Neotropical Ichthyology
osmarluizjr@gmail.com, osmar.luiz@dbca.wa.gov.au

Anonymous reviewer #1
Recommendation. Major Revision
Comments. Dear Authors,
The manuscript entitled "Reef Fish Biophony under Tourism-Driven Sound Pollution in Northeastern Brazil" aims to investigate the influence of tourism-related noise on reef fish acoustic activity. The topic is timely and relevant, and the dataset collected has the potential to contribute to our understanding of soundscape dynamics in

coastal reef systems. However, several aspects of the experimental design, analytical approach, and interpretation of the results raise concerns regarding the robustness of the conclusions and the way the discussion is currently framed. In its present form, I believe that substantial revisions are required before the manuscript can be considered for publication. I therefore recommend major revision. Nevertheless, I provide detailed comments below in the hope that they will be useful to the authors in strengthening the study.

General comments

The first two objectives of the study are clearly stated and, in principle, can be addressed with the data collected. However, the third objective, aimed at comparing the effects of anthropogenic noise on fish sounds, cannot be adequately evaluated with the experimental design and analytical approach employed.

The methodology does not allow isolation of fish biophony from anthropogenic noise, nor does it adequately control for key confounding factors such as temporal variability, recording simultaneity, or abiotic drivers known to strongly influence fish acoustic activity. As a result, the Acoustic Complexity Index (ACI) used in the analyses reflects integrated soundscape dynamics rather than changes in fish sound production.

Because this third objective is not directly testable with the current study design, the subsequent interpretation of the results and much of the discussion, particularly sections addressing fish responses, susceptibility to noise and acoustic masking, are not fully supported by the data. These sections would require substantial reframing to focus on soundscape-level patterns associated with tourism activity, rather than inferred biological responses of fish.

More broadly, the study relies heavily on ACI as a proxy for fish biophony in a context dominated by anthropogenic noise, without sufficiently addressing the conceptual and methodological limitations of this approach. In addition, key elements of the sampling design, such as recording simultaneity, control of abiotic variables, and sampling sufficiency for fish community characterization, are either unclear or not adequately accounted for. These limitations make it difficult to disentangle potential biological responses of fish from masking effects, temporal variability, and changes in overall soundscape composition.

Finally, the study does not report measurements of key abiotic variables, such as water temperature, which are known to strongly influence fish acoustic activity. Without accounting for these factors, observed differences in ACI cannot be reliably attributed to anthropogenic noise, particularly when comparisons involve different seasons or potentially non-simultaneous recordings.

Specific comments

Page 5, Lines 12–16. The manuscript does not explicitly state whether acoustic recordings were conducted simultaneously across sites. This information is essential for evaluating the experimental design and reproducibility. Without simultaneous recordings, differences in acoustic metrics may be driven by temporal variability rather than by the factors of interest.

Fish community characterization. The fish community was characterized using five transects; however, the manuscript does not justify this sampling effort nor demonstrate its adequacy. No analyses of sampling sufficiency (e.g., species accumulation curves) are presented, making it difficult to assess whether the observed community composition reliably represents local fish diversity.

Page 8, Line 28. Using ACI to assess the influence of anthropogenic noise on fish biophony is conceptually problematic, as the index integrates all sound sources present in the recordings, including the anthropogenic noise being tested as a predictor. This raises concerns regarding circular reasoning.

Page 8, Lines 31–37. If anthropogenic noise spectrally overlaps with fish vocalizations, ACI cannot disentangle masking effects from changes in fish sound production, making

it impossible to assess whether observed patterns reflect biological responses or acoustic interference.
Page 13, Lines 44–48. The identification of distinct fish sound types does not, by itself, demonstrate susceptibility to anthropogenic noise.
Page 13, Lines 52–55. Given the acknowledged spectral overlap between anthropogenic noise and fish sounds, it remains unclear how the authors disentangle changes in ACI caused by masking from those caused by changes in fish sound production.
Page 14, Lines 7–12.If certain sound types were undetectable, it is not possible to determine whether they were absent, masked, or simply not recorded, making subsequent interpretation speculative.
Page 14, Lines 12–16. The discussion refers to acoustic masking as an explanation for the observed patterns; however, masking is not directly assessed in the analyses. The study does not quantify signal-to-noise ratios, evaluate noise levels within specific frequency bands, assess sound detectability, or compare sound presence under controlled noise conditions. Therefore, while masking is a plausible interpretation, it is not explicitly tested or quantified in the present study and should be framed more cautiously.
Page 16, Lines 55–59. Although the authors acknowledge limitations of ACI, the discussion concludes that the index was adequate to evaluate the effects of anthropogenic noise on fish sounds and to identify response patterns. Given the inability of ACI to separate biophony from anthropogenic noise, particularly under conditions of spectral overlap and masking, this conclusion is not supported by the methodology. At most, the results describe changes in soundscape complexity perhaps associated with tourism activity, rather than demonstrated biological responses of fish.

Anonymous reviewer #2
Recommendation. Minor Revision
Comments. While the results clearly show strong associations between exposure to tourism-related noise and reduced occurrence of fish sounds, some sections of the manuscript imply direct causal effects. Given the observational nature of the study, causal language should be softened. I recommend explicitly framing the findings as patterns consistent with masking, behavioral suppression, or reduced detectability, rather than definitive causal impacts.
The ACI is used as a central metric to infer changes in biophony under noise exposure. Although the authors acknowledge limitations, the discussion would benefit from a deeper treatment of the sensitivity of ACI to continuous anthropogenic noise and methodological settings. A clearer distinction between reduced biological complexity and increased dominance of anthropogenic signals is recommended.
The choice of limiting most analyses to 0.05–2.5 kHz is generally justified; however, some fish sound types extend beyond this range. The authors should clarify how excluding higher frequencies may influence interpretation, or explicitly state that conclusions are restricted to low-frequency biophony.
The inference of sound production based on taxonomic relatedness is reasonable but should be more clearly framed as potential soniferous capacity rather than confirmed sound production. This clarification is important to avoid overinterpretation of richness patterns.

Author's Rebuttal Letter (22/01/2026).
Dear Dr. Osmar Luiz and Editorial Board of Neotropical Ichthyology,
We have carefully revised the manuscript and prepared a comprehensive rebuttal letter for this new submission. In that document, we address all points raised during the previous round of review. The reviewers' comments were highly valuable and greatly appreciated, and their suggestions substantially improved the manuscript. For clarity, each comment was sequentially numbered in the rebuttal letter, followed by our

detailed responses in blue.
If any additional information is required, please do not hesitate in contacting us via the email provided below. Thank you for your time and consideration.

Associate editor's decision after peer review (27/01/2026).
Dear Mr. Xavier:
Re: Manuscript ID NI-2025-0193.R1 entitled "Reef Fish Biophony under Tourism-Driven Sound Pollution in Northeastern Brazil" which you submitted to the Neotropical Ichthyology.
I've received your resubmission of the manuscript however, I cannot find any file with your point-by-point response to reviewers' comments. Your entry at 'Authors' Response' just read as below:
"Dear Dr. Osmar Luiz and Editorial Board of Neotropical Ichthyology,
We have carefully revised the manuscript and prepared a comprehensive rebuttal letter for this new submission. In that document, we address all points raised during the previous round of review. The reviewers' comments were highly valuable and greatly appreciated, and their suggestions substantially improved the manuscript. For clarity, each comment was sequentially numbered in the rebuttal letter, followed by our detailed responses in blue.
If any additional information is required, please do not hesitate in contacting us via the email provided below. Thank you for your time and consideration."
Please re-submit your manuscript including the authors' response to reviewers.
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Because we are trying to facilitate timely publication of manuscripts submitted to the Neotropical Ichthyology, your revised manuscript should be submitted before 27-Jul-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.
I look forward to a resubmission.
Sincerely,
Dr. Osmar Luiz
Associate Editor, Neotropical Ichthyology
osmarluizjr@gmail.com, osmar.luiz@dbca.wa.gov.au

Author's Rebuttal Letter (27/01/2026).
No rebuttal letter was sent by the authors when submitting the revised version of the manuscript.

Associate editor's decision after peer review (16/02/2026).
Dear Mr. Xavier:
It is a pleasure to accept your manuscript entitled "Reef Fish Biophony under Tourism-

Driven Sound Pollution in Northeastern Brazil" 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 our Social Media Editor, Igor Souto-Santos, at icass.ufrj@gmail.com within 30 days.

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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 send an e-mail to neoichth@nupelia.uem.br 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. Osmar Luiz
Associate Editor, Neotropical Ichthyology
osmarluizjr@gmail.com, osmar.luiz@dbca.wa.gov.au

Neotropical Ichthyology

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