Review of: "Food and Feeding of Atlantic Mudskipper Periophthalmus Barbarus in Ogbo-Okolo Mangrove Forest of Santa Barbara River, Bayelsa State Niger Delta, Nigeria"

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Potential competing interests: No potential competing interests to declare.

Introduction

1. Clarity and Organization

  - The text is organized into several paragraphs, each addressing specific aspects of the mudskipper's biology, behavior, and ecology. However, there are instances where the information feels somewhat jumbled, making it challenging to follow the flow of ideas.

  - To enhance clarity, the text could benefit from better paragraph transitions and clearer delineation of topics.

2. Depth and Detail

  - The text provides a considerable amount of detail regarding the physical attributes, behavior, and habitat of the Atlantic mudskipper. It covers various aspects of the mudskipper's biology, including its locomotion, feeding mechanisms, reproduction, and environmental adaptations.

  - The inclusion of references adds credibility to the information presented, demonstrating that it is based on scientific research. However, some of the references cited are not directly linked to the statements made, which may confuse readers.

3. Accuracy and Consistency

  - Overall, the information presented appears to be accurate and reflects current scientific knowledge about the Atlantic mudskipper. The text includes references to support factual claims, which is commendable.

  - However, there are instances where the writing could be more precise and consistent. For example, the text occasionally repeats information or uses repetitive phrases, which could be streamlined for clarity and conciseness.

Methodology

1. Clarity and Detail:

  - The text provides clear descriptions of the study area, including its geographical location, habitat characteristics, and the significance of the mangrove forest for aquatic organisms and local fishing activities. It effectively communicates the

methods used for sample collection and analysis.

  - However, the text could benefit from additional details regarding the specific objectives of the study and the rationale behind the chosen research methods. Providing this context would help readers understand the purpose and significance of the research.

2. Sample Collection Methods:

  - The text describes the fish trapping method used to collect mudskippers, detailing the equipment and bait used in the process. It specifies the time frame and environmental conditions during which the specimens were obtained, which is essential for understanding potential seasonal variations in mudskipper behavior and diet.

  - However, it would be helpful to include information on sample sizes, sampling locations within the study area, and any measures taken to minimize bias or variability in the collected specimens.

3. Analytical Techniques:

  - The text outlines two methods used to analyze the gut contents of mudskippers: the frequency of occurrence method and the numerical abundance method. It explains the procedures involved in each method and references previous studies that have employed similar approaches.

Also avoid these kinds of repetitions

"To evaluate the food of *P. barbarus* using the numerical abundance method. The numerical abundance method was used: In this method, the number of individuals of each food type in each stomach"

Discussion

Clarity and Detail:

The text provides a clear overview of the food items found in the stomachs of the mudskippers, utilizing both the frequency of occurrence and numerical abundance methods. It effectively communicates the percentages of different food items across different size ranges of the mudskippers.

However, the text could be more concise and organized. The lengthy descriptions of food items and their percentages make the text dense and difficult to follow. Breaking down the information into smaller, more digestible sections would improve readability.

Integration of Previous Studies:

The text references previous studies on mudskippers and other fish species to contextualize the findings. This demonstrates an understanding of existing literature and helps establish a basis for comparison.

However, the text could elaborate more on how the current findings relate to or differ from those of previous studies.

Explaining the significance of these comparisons would provide valuable insights for readers.

Analysis of Variability:

The text acknowledges variations in food item percentages across different studies, species, sizes of fish, and environmental conditions. This recognition of variability is important for understanding the complexities of mudskipper diets and ecological interactions.

However, the text could delve deeper into the potential factors driving these variations, such as habitat differences, seasonal changes in food availability, and species-specific feeding behaviors.

Scientific Rigor:

The text adheres to scientific conventions by citing previous studies and providing detailed descriptions of the research methods used. This enhances the credibility and reproducibility of the findings.

However, the text could benefit from additional information on sample sizes, sampling methods, and any limitations or biases associated with the study design. Providing these details would offer transparency and facilitate critical evaluation of the research outcomes.

Overall

Detailed Data Presentation: The text offers a thorough analysis of Atlantic mudskipper stomach contents, providing insights into their feeding habits using various methods.

Integration of Prior Research: By referencing past studies, the text contextualizes its findings and contributes to the existing body of scientific knowledge on mudskipper diets. But needs to discuss differences in this research and past research results.

Recognition of Variability: The text acknowledges differences in food item percentages across studies, species, and environmental conditions, highlighting the complexity of mudskipper feeding ecology. Needs graphical representation and comparison between size classes.

Scientific Rigor and Transparency: The research demonstrates scientific rigor through established methods and references, but could enhance transparency with more details on sample sizes and limitations.

Improvement Opportunities in Clarity: Although informative, the text could improve readability by simplifying language and organizing content more clearly for a wider audience.