

# Review of: "Collective Córregos Da Tiririca- Restoration of Riparian Forest in a Stream Contributor of Itaipu Lagoon – Niterói- RJ"

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Potential competing interests: No potential competing interests to declare.

## 1. Overview of the Itaipu-Piratininga Lagoon System:

The manuscript provides a detailed overview of the Itaipu-Piratininga lagoon system, discussing its historical, environmental, and social significance, as well as the challenges it faces. Its multidisciplinary approach integrates environmental science, social dynamics, and restoration ecology to comprehensively address the complex challenges facing the lagoon system.

## 2. Evaluation of Methodology:

Given the reviewer's limited expertise in evaluating the employed methodology, the review defers to the expertise of the authors. Their comprehensive understanding of the field allows them to provide valuable insights into the validity and suitability of their approach, ensuring a thorough examination of the Itaipu-Piratininga lagoon system and its restoration efforts.

## 3. Description of the Study Area:

The description of the study area provides a comprehensive overview of the geographical features and hydrological dynamics surrounding the Serra da Tiririca and the Itaipu-Piratininga lagoon system. Some potential issues with clarity and lengthiness of sentences are identified, suggesting improvements for better readability and understanding. Some sentences are lengthy and may benefit from being broken down for better readability.

Here are some lengthy sentences in the description of the study area that could benefit from being broken down for better readability:

- "Nowadays, the opening of the lagoon system with the sea is made in a perennial way, in the Itaipu channel, and the perennial connection between the sea and the lagoon has covered its surroundings with mangroves, where the white mangrove *Laguncularia racemosa* predominates."
- "The Colibris stream, the object of this study, has its headwaters within the Serra da Tiririca State Park, upstream of the Colibris stream trail, accessible by Scylla Souza Ribeiro Street, in the Peixoto neighborhood in Itaipu, Niterói."
- "Downstream of the protected area, the stream continues channeled, crossing the Peixoto neighborhood, and emerges in its final stretch after crossing the Francisco da Cruz Nunes road downstream of the 4th GMAR fire station."
- "In a stretch of 420 meters along Boa Vista Avenue, the first stage of the process of restoring the riparian forest with

syntropic agriculture began."

#### 4. Environmental Changes:

The narrative touches upon historical and contemporary changes in the landscape, such as the construction of the Camboatá channel and the restoration efforts along the Colibris stream. Suggestions are made to delve deeper into the environmental impacts of these changes and how they have influenced the hydrological and ecological dynamics of the area.

#### 5. Córrego da Tiririca Collective:

The collective's engagement with various stakeholders and its initiatives to address environmental issues in Niterói are discussed. While the manuscript highlights progress in restoration efforts, suggestions are made to provide more details on methodologies and outcomes to enrich understanding of their effectiveness.

#### 6. Discussion and Conclusions:

The discussion delves into the historical significance of the Colibris stream and reflects on the challenges faced by urban streams amidst rapid urbanization. The integration of syntropic agriculture and agroecological practices emerges as a sustainable solution, with a focus on collaborative networks and community engagement. Overall, the manuscript is considered a valuable contribution, with minor suggestions for improvement identified.