

CARBON DIOXIDE (CO₂) EMISSIONS BY VISITORS TO THE DELTA DO PARNAÍBA CONSERVATION AREA (PIAUI STATE, BRAZIL)

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Climate change represents the focal point of the contemporary crisis between society and nature, and will soon come to affect all human activities. In light of this critical new situation, the planning and administration of protected areas must take into account actions that can lower anthropogenic carbon emissions. The present work evaluated the impacts of tourism on the APA do Delta do Parnaíba Conservation Area in Piauí State, with emphasis on inventorying carbon dioxide (CO₂) emissions from visitors and examining the principles of low-carbon tourism through bibliographic studies and field research. Our results indicated that the average rate of CO₂ emission per visitor to the Conservation Area was 39.2 kg per day, with the consumption of fossil fuels being responsible for 91.3% of that production. In this way, it was found that the inventory of CO₂ emissions was essential for assessment of the impacts of visitation, based on low-carbon tourism model. Under this scenario, it recognized the need for research in other tourist destinations and specific segments in order to expand the scientific knowledge on this subject.

KEY WORDS: *Low-carbon tourism, climate change, sustainability, conservation areas, Delta do Parnaíba.*