
Biodiversity and wildlife tourism in Southern Africa: a cultural ecosystem service assessment

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Résumé

The concept of cultural ecosystem-services (CES) represents a great opportunity to investigate the interaction between people and biodiversity. CES assessments therefore require approaches that involve both ecological and social factors in order to understand how biodiversity contributes to the delivery of ecosystem services. Here we study wildlife tourism as an important CES in Southern Africa. We simultaneously gathered data on large mammal abundance and sighting probabilities using transect counts and performed a social survey using questionnaires in four protected areas (Etosha, Chobe and Kruger National Parks and Hluhluwe-Imfolozi Game Reserve) in Namibia, Botswana and South Africa. We had three objectives: 1) understanding which biodiversity metrics are relevant in CES assessments, 2) identifying the supply and the demand of CES and test the potential supply-demand mismatch in the four protected areas, and 3) assessing wildlife tourists' attitudes towards savannah landscapes in the context of global change. Our results demonstrate that subcomponents of biodiversity (*i.e.* charisma and rarity of species) need to be considered for CES assessments. We also found that supply-demand frameworks are particularly useful for CES studies and for guiding long-term management of African protected areas. We further show how wildlife tourists perceive vegetation during their safari drives and discuss how changes in vegetation may impact the viewing experience of wildlife tourists in the future.

Mots-Clés: Africa, Biodiversity, Cultural ecosystem services, Mammals, Predators, Ungulates, Wildlife tourism

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