



Royal Holloway Geography for Schools Lecture Series

Biocultural landscapes

Biodiversity, people and conservation in the Rupununi, Guyana

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A-Level Syllabus

AQA Ecosystems under stress: ecosystems and sustainability, biomes, case study of a specific region experiencing social-ecological changes.

Biocultural landscapes arise from the dynamic links and feedbacks between human cultural diversity and biological diversity.

The Rupununi region of Guyana is a good example of a biocultural landscape. There is increasing evidence that the high fish biodiversity of the Rupununi is in part as a result of a hydrological link between the Amazon and Essequibo basins, allowing species from both basins to intermingle in this region. Makushi and Wapishan Indigenous peoples inhabit the region, and their traditional knowledge contributes to biocultural diversity.

Community owned solution, practices that are developed, controlled, managed by Indigenous peoples, are the basis of the biocultural landscape. These include rotational forest farming, fishing, and community work, that have significance for sustainability at the local level, but also implications at the global scale in terms of promoting ecosystem integrity, food sovereignty and nature stewardship, amongst others.

However, Guyana is economically poor, and natural-resource exploitation and foreign pressure to convert natural habitats into industrial farms, logging, mining, and associated infrastructure, especially access roads, is having increasing impact on the Rupununi biocultural landscape, particularly loss of species and habitat connectivity. This has the potential to further deteriorate sustainable traditional livelihoods, already under pressure from globalisation and the market economy, forcing many more Indigenous people to migrate to towns and cities in search of often poorly paid work.

Mitigating the impacts requires a diversity of strategies. These include promoting Indigenous land rights and traditional knowledge, building capacity in Indigenous peoples to use specific tools for environmental monitoring and communication, and incentivising sustainable economic activities such as ecotourism and small-scale farming.

A quarter of the global land area is traditionally owned, managed, used or occupied by Indigenous Peoples, and we need to recognise their critical role in biodiversity conservation and climate change mitigation.

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Further reading and watching:

- The Rupununi Wetlands (animation explaining the hydrology and high biodiversity): <https://vimeo.com/user109468882>
- Community owned solutions (videos made by Indigenous peoples and local communities on traditional practices): <https://communityownedolutions.org>
- Mistry, J. 'Defending the environment now more lethal than soldiering in some war zones – and indigenous peoples are suffering most' The Conversation (5 August 2019): <https://theconversation.com/defending-the-environment-now-more-lethal-than-soldiering-in-some-war-zones-and-indigenous-peoples-are-suffering-most-118098>
- Berardi, A. 'Adventure in the Amazon' (choose-your-own-adventure story that explores the key challenges that are facing the Rupununi region in the Amazon): <https://www.open.edu/openlearn/nature-environment/adventure-the-amazon>
- Darwin Initiative project on traditional knowledge in Guyana (various articles about traditional knowledge and its links to biodiversity): <https://cobracollective.org/tag/darwin/>

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