

Population diversity and wellbeing of southern Africa's socio-ecologically important Anguillid Eels in KZN rivers

**G.C. O'Brien, University of KwaZulu-Natal
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Ten species of anguillids occur in the tropics and subtropics, including four species in East Africa that are found sympatrically in KwaZulu Natal. There is a huge debate regarding whether subpopulations of these species exist and whether these possible subpopulations have single or multiple spawning grounds, as these areas have only been established with certainty for a few species. Where they occur, anguillid eels play an important ecological role in freshwater and brackish habitats and generate numerous ecosystem services. Worldwide, anguillid eels are facing growing threats especially because of overexploitation, pollution and habitat loss. Temperate eels population have declined dramatically to the point of endangerment in the last decades. In Southern Africa, eels face increasing threats, namely regarding growing exploitation demands and development of water resource management schemes along the east flowing rivers of South Africa in particular. Despite their socio-economic and ecological importance, the level of understanding regarding their occurrence, abundance, diversity and ecology still remains poor. Without this knowledge we are unable to adequately conserve these flagship species and the services they generate, and manage the rivers they occur in. In the other hand, a better knowledge of their dynamics and diversity could open up economic opportunities. This project then aims to address the gap in our understanding of these species by generating information regarding their distribution and population diversity and wellbeing as well as promoting biodiversity and river conservation for the benefit of all users.