## An investigation into human-crocodile co-existence in the Limpopo-, Luvuvhu-, and Olifants Rivers within Limpopo Province, South Africa

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Abstract: Human-crocodile conflict (HCC) is a growing problem in Africa which mainly involves the Nile crocodile (Crocodylus niloticus). Compared to some other African countries, HCC research is limited in South Africa, while perceptions towards crocodiles remain unstudied. The aim of this study was to investigate the nature and extent of HCC and the perceptions towards crocodiles of people living adjacent to three large river systems in the Limpopo Province. A total of 275 questionnaire surveys were conducted at Limpopo River (50), Luvuvhu River (106), and Olifants River (119). One-hundred-and-twenty HCC incidents were recorded, mostly at Luvuvhu River (52.5%), followed by Olifants River (30%) and Limpopo River (17.5%). These incidents included attacks on humans (52.5%), attacks on domestic animals (34.17%) and damaged fishing equipment (13.33%). Potentially dangerous activities identified were fishing, fetching water, washing laundry, swimming, and crossing rivers. People most vulnerable to crocodile attacks were African men and women, children, people with a low level of education as well as the unemployed. Respondents who liked crocodiles (41.61%) mostly accepted them as part of the environment (46.49%) or God's creation (20.18%), while respondents disliking crocodiles (55.47%) gave depredation on humans (57.89%) and domestic animals (15.47%) as motivations. Their dislike was mainly influenced by HCC experiences of friends and/or family as well as the proximity of crocodiles to human habitations. Education campaigns should be the main HCC focus with children and other highly susceptible groups of HCC as the primary target audiences. Future HCC research in South Africa should not be limited to attacks on humans, but also include other types of HCC such as persecution and poaching.

Keywords: Crocodile attacks, Domestic animal losses, Nile crocodile, DCAs

*Type of presentation:* Poster

Thematic area: Socio-economic issues (Human-crocodile interaction)