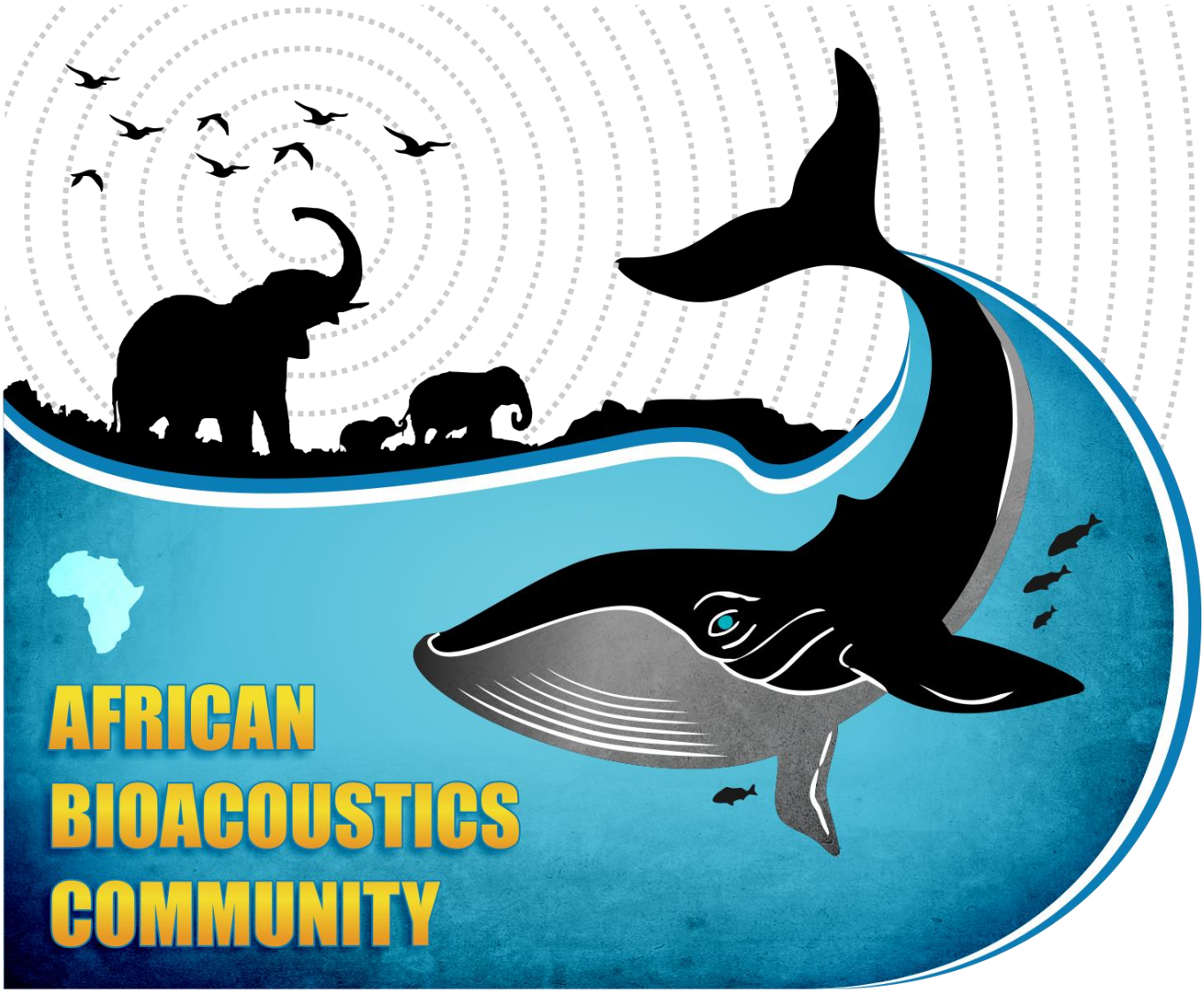

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Acoustic effects of boat traffic on the acoustic signals of Indian Ocean Humpback Dolphin (*Sousa plumbea*) in the Richards Bay harbour - Lindy Wolhuter, Shanan Atkins, Geremy Cliff and Neville Pillay

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Indian Ocean humpback dolphins (*Sousa plumbea*) are endangered. The population in South Africa is threatened by shark nets that are in place to protect the bathers. Other threats to this population have not been assessed. One possible threat is the impact of boat noise on the dolphin's acoustic behaviours. The Richards Bay harbour entrance is a core feeding area for humpbacks and is probably a key habitat for much of the humpback dolphin population in KwaZulu-Natal. The aim of this study is to investigate the impact of boat and ship noise on the acoustic behaviours of the humpback dolphins at Richards Bay . This will be achieved by assessing whether there are changes in the number of whistles and clicks made before, during and after boats/ships pass through the harbour entrance. Special attention will be paid to the ratio of signature whistles to non-signature whistles since signature whistles are cohesion calls and can potentially indicate stress by the dolphins. We have deployed a SoundTrap 300STD hydrophone in the harbour entrance and recorded 59 min of every hour at a sampling rate of 48kHz. The data are currently being analysed and call emission rates will be compared using Wilcoxon signed-rank tests.

Dogs (*Canis familiaris*) and dholes (*Cuon alpinus*) squeak close to ultrasound - Elena Volodina & Ilya Volodin

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Preliminary analyses of domestic dog *Canis familiaris* and dhole *Cuon alpinus* calls revealed the independent fundamental frequency h0 expanding to frequency range close to ultrasound (up to 19 kHz). In both dog and dhole, these practically inaudible for adult humans high-frequency calls are emitted with a closed mouth. So it is no wonder why they were not detected to date. We provide detailed analyses of call spectra of selected example calls of dholes and dogs. We show that the h0 can be produced singly as a separate call or can show frequency jumps from the h0 to the independent lower fundamental frequencies (f0 and g0, each with own set of harmonics) and back. Occasionally, the h0 displayed frequency jumps within h0, reminiscent those in ultrasonic calls of rodents. Being produced simultaneously, the f0, g0 and h0 interacted with appearance of combinatory frequency bands, indicating production of f0, g0 and h0 from three different sound sources. The combinatory frequency bands lacked when the h0 frequency was occasionally integer multiple of f0 or g0. For the future quantitative analyses of f0, g0 and h0, we collected 24 hours of recordings of peaceful contact calls from 12 adult (9 male, 3 female) and 4 subadult dholes (3 males, 1 female) and 20 hours of recordings of low-excitation whines from 11 adult domestic dogs of different breeds. In both dogs and dholes, the h0 occurred not in all individuals and substantially more rarely compared to the f0 and g0. In the dholes, the f0max ranged of 0.8-1.0 kHz, the g0max of 8.8-10.2 kHz and the h0max of 16-19 kHz. In the dogs, the f0max ranged of 0.7-1.6 kHz, the g0max of 4.3-12.0 kHz and the h0max of 14-16 kHz. Supported by the RSF grant 14-14-00237.