

MONITORING OF THE MBASHE RIVER

MAY 2008



water & forestry

Department:
Water Affairs and Forestry
REPUBLIC OF SOUTH AFRICA



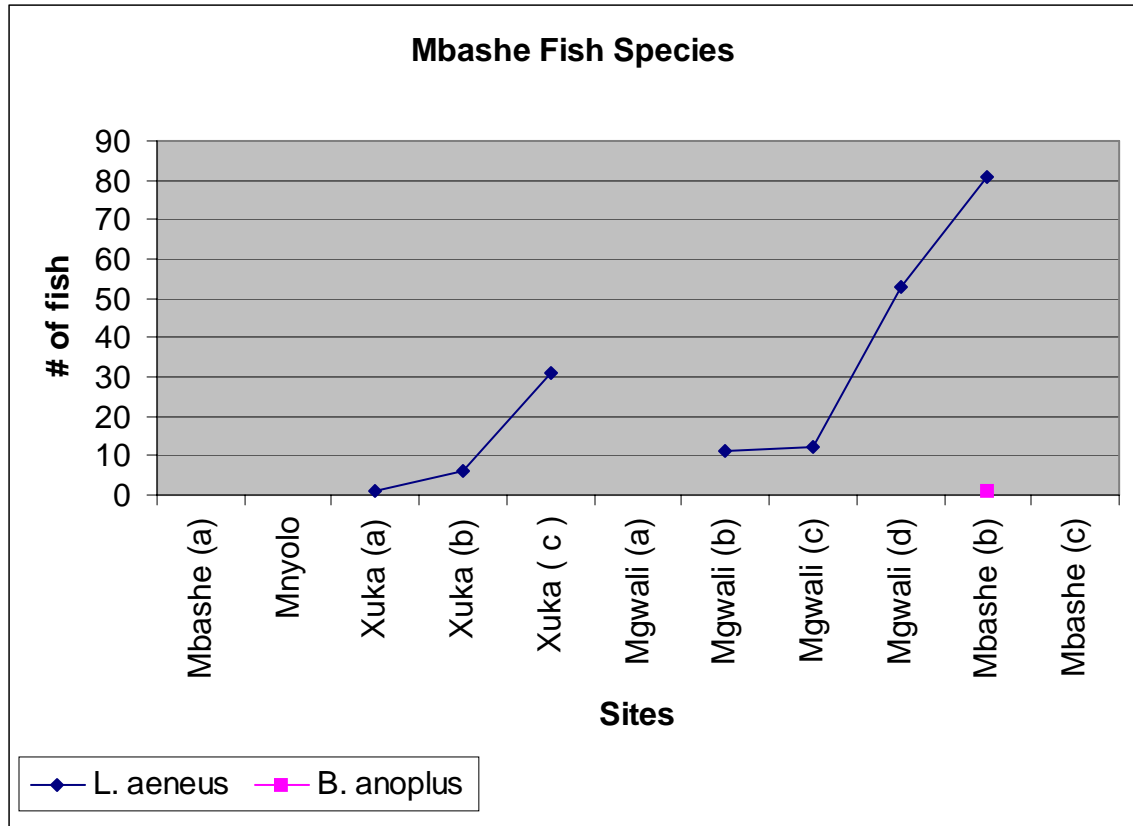
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Introduction

M. Mbikwana, T. Bushula, K. Mkosana, P. Tshatshu, N. Tshefu, T. Guzana and E. Weni conducted continuous monitoring of the Mbashe River from the 19-22 May 2008.

Results/Findings



Site 1: Mbashe upper reaches (Mbashe (a))

Site 2 : Mnyolo Bridge

Site 3 : Xuka at Silindini (Xuka (a))

Site 4 : Xuka at R61 bridge (Xuka (b))

Site 5 : Xuka at Mhlophekazi (Xuka (c))

Site 6 : Mgwali at R61 bridge (Mgwali (a))

Site 7 : Mgwali at Ngcacu bridge (Mgwali (b))

Site 8 : Mgwali at Tora (Mgwali (c))

Site 9 : Mgwali at Makhobokeni (Mgwali (d))

Site 10 : Mbashe at N2 bridge (Mbashe (b))

Site 11 : Mbashe at Mpozolo (Mbashe (c))

Discussion and conclusion

No fish were caught at the following sites: Mbashe Upper reaches; Mnyolo and Mgwali at R61 bridge. At these sites, the water was clear and the fish would be vulnerable to predation by birds and fishermen. This resulted to the fish to migrate to safer environment. Our only fishing gear, seine net, was not effective enough to catch fish as the net repeatedly entangled boulders.

A number of *L. aeneus* (both juveniles and adults) was caught at Mgwali (at Makhobokeni) and Mbashe (at N2 bridge). In both these sites water was turbid. The same species were also caught in the following sites : Mgwali (at Ngcacu and Tora) and Xuka (at Silindini, R61 bridge and Mhlophekazi), although in few numbers. Clear and turbid colour of water resulted to absence and abundance of fish, respectively. A further research needs to be done to investigate the absence of indigenous species (such as *Barbus anoplus*, *Anguilla mossambica* and *Anguilla marmorata*, and gobbies). The Fuzzy Fish Index (FFI) was not implemented because only the alien *L. aeneus* (Smallmouth yellowfish) was dominant. If it was implemented, all the sites would have been at category **F**, implying the critically modified environment.

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Signature