

Abstract

The lesser flamingo(LF) (*Phoeniconaias minor*) is the most abundant waterbird species in Kenya and a major attraction for ecotourism in many parts of Africa (Harper 2003; Nasirwa, 2000; Owino et al., 2001; Owino et al., 2002). It is an obligate filter feeder and the main primary consumer of the prolific algae (*Arthrospira fusiformis*) in the saline Rift Valley lakes of East Africa thus making it a key bioindicator species of aquatic ecosystems. It is also a flagship species for the wetlands (Jenkin, 1957; Vareshi, 1978). Mass deaths of LF have become more frequent in eastern Africa over the last two decades and have been recognized as one of the threats to conservation of the species (Koyo and Owino, 2010; Lugomela et al., 2006; Ndeti and Muhandiki, 2005; Beasley et al., 2004; Kock et al., 1999; Motelin et al., 1995; Sileo et al., 1979; Tuite, 1974; Manyibe et al., 2007). Previous investigations have implicated infectious and toxicological diseases, acting in combination with various environmental stressors, as the causes of mortalities. This paper reviews these investigations highlighting their salient features and proposes multidisciplinary approaches for better addressing the problem in the future.