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**Ecology of the white lion: conservation management of the white lion (*Panthera leo melanochaita* Hamilton Smith 1842) in the Greater Kruger Park Region, South Africa**

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# Ecology of the White Lion

Conservation Management of the white lion  
(*Panthera leo melanochaita* Hamilton Smith 1842)  
in the Greater Kruger Park Region, South Africa

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## Propositions

1. The frequency of occurrence of the recessive white lion gene is higher than expected in the African lion population of the Timbavati Private Nature Reserve and the central region of the Kruger National Park, in South Africa. (this thesis)
2. Based on my observations I hypothesise that white lions have advantages with nocturnal hunting compared to tawny lions because they are better camouflaged on a moonlit night than tawny lions.
3. I hypothesise that white lion males may be selected in preference to wild tawny males by wild tawny lionesses.
4. The importance of white lions in terms of their conservation value, cultural meaning, touristic appeal, and iconic value makes them an ideal flagship for protecting the Kruger to Canyons Biosphere Reserve. (this thesis)
5. Poaching of lions for the illegal trade in lion body parts is a main threat to the survival of lions in Africa. The cultural meaning of the species to local communities can be utilised as a way to better mitigate this and other threats.
6. Social Network Analysis (SNA) is relatively new to studying lion social systems, but provides important information relevant to the success of lion translocation and reintroduction, particularly in the South African context.
7. The metapopulation management approach for lions in South Africa has helped to ensure reintroduction success, genetic diversity, and 'healthy' ecosystems in terms of predator-prey balance and habitat-ungulate equilibrium.
8. The hunting of captive lions (also known as 'canned hunting') and legalised trade in lion body parts have been under-estimated in terms of their negative impact on lion conservation in South Africa. See for example IUCN (2020) and Coals et al. (2022).
9. In certain countries, including South Africa, there is motivation by many conservationists, environmental lawyers, and animal welfare experts for a shift from conventional anthropocentric conservation practices towards an eco-centric approach. See for example Cruise (2019).
10. The Disney animated movie "The Lion King" has a greater audience, and is likely to be better remembered globally than the many National Geographic and BBC documentaries that have been broadcasted on lions.