

# Effects of castration on captive male lions

## ABSTRACT

The effects of an orchidectomy (or surgical castration) on the behaviour of domesticated animals, including felines, are well known. Whilst in the domestic environment, castration is a common method of contraception, in captive populations of wild animals it is less so. The most common use of castration in the captive populations is as a treatment for sustained injuries, with a relatively small number of the procedures being conducted for contraception purposes. In addition, the majority of the procedures conducted are carried out on individuals that are usually kept in isolation. Due to this, investigations into the effects of castration on the behaviour of captive wild felines are limited; with no known previous studies having been conducted on the African lion (*Panthera leo*). Since this is a highly social species, the effects of castration on *P. leo* would be of interest. This investigation sought to examine what behaviour and physical effects resulted when male lions were castrated and kept within the pride structure as they matured.

Behaviours of a captive pride including three castrated males were observed over a six-week duration. The results indicate that castration of male lions leads to a decrease in both aggressive and territorial actions. In addition the castrated males showed altered activity and interaction levels and, most noticeably, displayed a change in physical appearance compared to uncastrated males. The studied males were also three years of age and instead of being ousted from the pride, as usual, they were still fully integrated with the pride.

This study suggests that it may be possible to use the castration of males in order to control captive population breeding programs and act as an alternative to chemical forms, which display many negative reactions.