

# Return of the Skeleton Coast Lions



## **Palmwag to Rockypoint: studying the return of lions to the Skeleton Coast**

The image of a lion walking along an isolated beach has captured the imagination of many filmmakers, scientists, and wildlife enthusiasts...



It is a phenomenon that, today, only occurs along Namibia's northern coastline. The Skeleton Coast lions became famous in the late

1980's, when wildlife film producers, like National Geographic, released remarkable images of lions on the beach, captured primarily by the legendary wildlife filmmakers, Des and Jen Bartlett. Dedicated nature conservators in the Skeleton Coast park monitored the lions regularly, and the old Department of Nature Conservation supported a rudimentary research project on the lions. Although funding and resources were limited, we radio collared 5 lions and collect a fair amount of data on their movements and ecology. The coastal lions, of the 1980's, maintained a stable presence in the Skeleton Coast Park. They hunted and fed on the available prey, like seals, beached whales, and gemsbok, and they were breeding successfully .

These individuals illustrated remarkable adaptation to the unique and extreme ecological conditions.

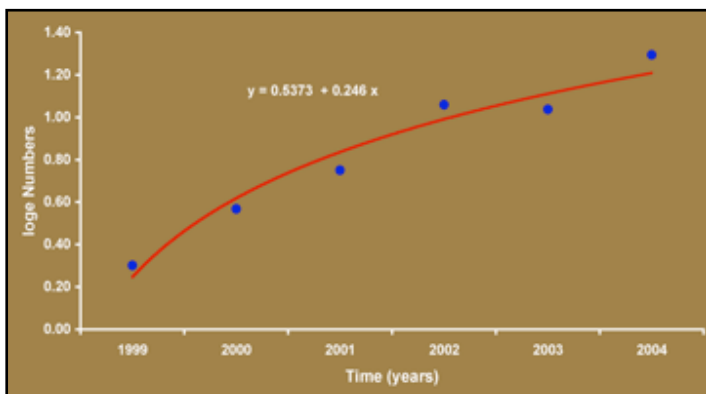
However, the bordering land-use practises, at that time, were not conducive to wildlife conservation, and especially not to lions. The Namibian tourism industry was just cutting its teeth, and community-based conservation was a foreign concept. In an area with tremendously high tourism value, local communities, living just outside the narrow Skeleton Coast Park ( $\pm 30\text{km}$ ) were attempting to survive from un-economical livestock farming. Conflict between the lions and livestock farmers was inevitable. Lions raided their livestock and local communities retaliated by shooting and poisoning lions.

At the end of 1990 all the known and radio-collared lions had been killed. In retrospect, and with the wisdom of time (and CBNRM!), it was a sad state of affairs. Killing lions was then the only available option, but only to protect an uneconomical and unsustainable livelihood, in an area with such high tourism potential.

## Predator Conservation Trust of Namibia

Ten years later the Kunene Lion Project, was launched under the guidance of the Ministry of Environment and Tourism. Lions had not been observed in the Skeleton Coast Park since the 1990 conflicts, but signs had been recorded further inland. More importantly, however, were the tremendous growth of the tourism industry, and the emergence of communal conservancies, where local people gained ownership over their wildlife and derived direct benefits, such as tourism-related levies. The environment for wildlife conservation, and for lions in particular, had changed considerably since the late 1980's, and it was time to revisit the lion conservation problem. The Kunene Lion Project was initiated in 1998 with an intensive burst of systematic research and monitoring. One year into the study, 20 lions had been radio-collared. Marked individuals were tracked from the air, over vast distances, and on the ground, over arduous terrain. Monitoring was focussed on the individual lion, and its' social interactions or associations with other lions. We collected data on births, cub survival, deaths, immigration, dispersal, and movements.

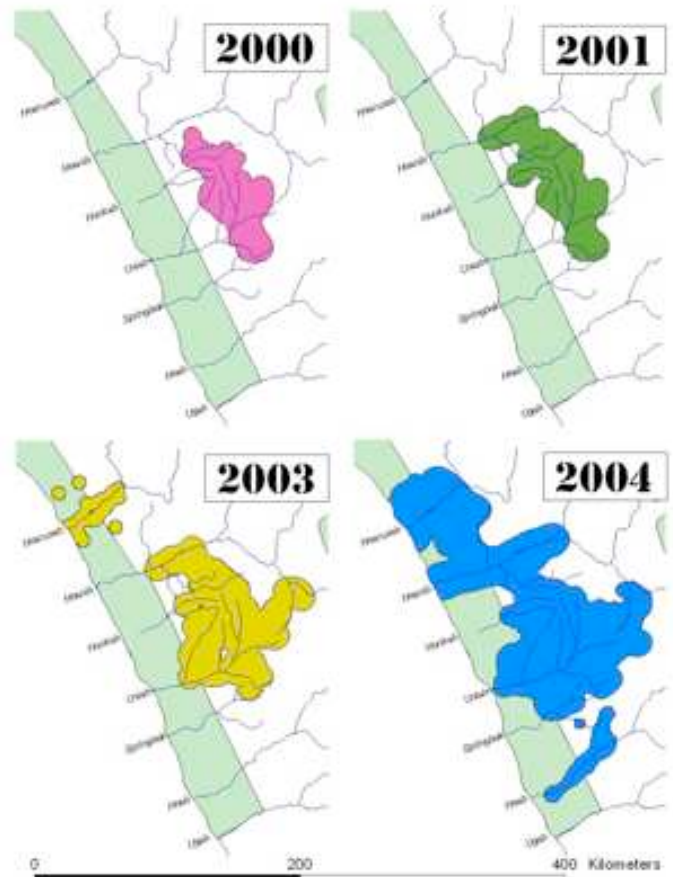
The efforts soon produced exciting results and the data showed that lionesses gave birth to large litters (mean = 2.8) and that cub survival was high (91%). In addition, cubs became independent early, and the interval between litters was shorter than elsewhere in Africa. These dynamics allowed the population to grow rapidly, and the annual rate of increase was over 25% in 1999, 2000 and 2003. On average, the Kunene population increased at an average rate of 19% per year.



## Popular Reports 2005

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With the increase in numbers, one could predict that the lion population will need to expand their range. In doing so, some lions will eventually find their way to the coast and, if food resources are adequate, establish themselves there. The results of our research on movements and dispersal, from 2002 to 2005, show that this prediction is quite accurate. In 2000 the Kunene lion population lived in an area of only 4,260 km<sup>2</sup> (see map).



Between 2000 and 2004, this area increased in size, by a factor of 6.7, and measured 28,880 km<sup>2</sup> in January 2005. Individual lions, and small groups, dispersing from their natal home ranges to occupy new habitats, marked this expansion.



The most interesting and significant dispersal came from a small group of four young lions (a female, named Xpl-10, and three males) that moved to the Hoaruseb River. They were born at Aub Canyon, near Palmwag, in September 1998. At the young age of 14 months, along with 6 other siblings, they broke away from their pride. At 20 months, Xpl-10 and the three males, separated from their siblings and moved, first to the Hoanib River, and settled eventually in the Hoaruseb River, more than 130 km to the north.

In July 2001 they got into trouble at Purros, when they killed cattle and a few donkeys. Due to the progress in community-based conservation, and the efforts of the local tourism concessionaire, the Purros community agreed that we should capture the lions and relocate them back into the Skeleton Coast Park. Much had changed since the late 1980's...

The following night, with the help of Wilderness Safaris, we darted and moved the lions back into the Park. The translocation was successful, and the immediate human-lion conflict was resolved.



The lions remained in the Hoaruseb River, and as time went by they ventured ever closer to the coast. In March 2002, Xpl-10 gave birth to two cubs, in a rock outcrop less than 5 km from the beach. Born and raised in the coastal area, it was not a surprise, when we eventually found the cubs on the beach in August 2002. From the known records, this sighting marked the return of lions to the coast, after an absence of 12 - 13 years. By October 2003 the two cubs had grown large enough to be radio-collared, and we darted them on the beach, at the mouth of the Hoaruseb River. A few months later, in April 2004, Xpl-10 produced her second litter. On this occasion the litter was born in the reeds, at the mouth of the Hoaruseb River. With her two sub-adult daughters, and two small cubs in tow, Xpl-10 remained in that area throughout 2004. Moving back and forth along the river, they spent a substantial amount of time on the coast. Xpl-10

can be seen as the founding lioness of a new era of Skeleton Coast lions. She has produced and successfully raised two litters of cubs on the coast, and has seen to it that they are suitably skilled and adapted for survival along Namibia's Skeleton Coast.

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