Oil spilled penguins post apollo sea

Cleaning up after the Apollo Sea Introduction The species Spheniscus demersus, more commonly known as South African penguins, also called Jackass penguins, have fallen victim to the negligence of oil carriers.

The population of South African penguins has decreased from 3 million to less than 150, 000 in the past century (Singer 2000). The cause of this unfortunate decrease in population are the many oil spills near southern Africa, with the first oil spill occurring in 1948 (Whittington 1999). Since 1968, the Southern African National Foundation for the Conservation of Coastal Birds (SANCCOB) has made attempts to rehabilitate oiled penguins (Whittington 1999). SANCCOB has treated some 40, 000 oiled penguins in the past 30 years. Oil on the penguins' feathers removes the waterproofing that the penguins rely on for insulation, which can ultimately lead to death (Singer 2000).

In the 1994 incident caused by the Apollo Sea, a Panamanian ore carrier, on June 20th, a total of 9, 600 oiled penguins were collected, 5, 200 of these birds died before the end of rehabilitation. The rescue operation to save the penguins cost about $US300, 000. The specialists of the SANCCOB have established many methods of rehabilitation in feeding, cleaning, and waterproofing this quickly diminishing species (Konings 1997). Many studies have been conducted using metal bands to determine the success rate for the rehabilitated penguins (Whittington 1999). Materials and Methods Penguins collected from Dassen Island and Robben Island, South Africa were transported to SANCCOB.

Once there, the penguins were re-hydrated with 30-50cc diluted Darrows solution. They were also given activated charcoal to absorb the oil ingested by the birds. Depending on the health of the penguins, they were fed one of four ways. In the first method, the tubing method, the volunteers force fed the penguins a puree of dead fish. In the next method, the fish offering/self-feeding method, the birds were trained to receive fish offered by hand. In the last method, the feeding box method, about six penguins entered a square box where they were offered fish and exited through the other end of the box once they had enough to eat (Konings 1997).

The penguins were also washed in one of two ways. In the spraying method one person held the penguin in a pool of water mixed with a mild soap while the other person scrubbed the bird; the penguin was then handed over to a second person that rinsed all of the detergent with a high pressure hose. The spraying method procedure took about 40 minutes. In the second method, the rinsing method, one person washed the penguin in a pool mixed with detergent, and then rinsed the penguin in two containers of clean water; this process took about 10 minutes (Konings 1997). The penguins required daily swimming to retain waterproofing (Konings 1997).

The only problem with containing the penguins in pools is the lack of space (Singer 2000). In order to investigate whether these rescue efforts were worthwhile, tests were performed monitoring the birds using metal flipper bands. Specialists studied the survival rate of oiled birds to non-oiled penguins, and considered the time between banding and death. The study included recoveries within a 10 year period from the date each penguin was

banded/released (Whittington 1999). Results Many factors caused the early death in the penguins that had not yet completed the rehabilitation process.

One reason for the death of the penguins was excessive handling by unskilled workers leading to high stress levels for the penguins. Inadequate transport supervision lead to workers packing the penguins too tightly to maximize the amount of birds transported; this tight packing resulted in suffocation. Another reason for the loss of African penguins was a lack of personnel in the most critical stage of the rescue. A shortage in surface transport on the island was also a factor leading to death; they had only one of three vehicles available for collecting the affected penguins (Konings 1997).

Within a ten year period of banding a total of 147 cleaned and 163 non-oiled penguins were retrieved dead. The average time elapsed between the release of a cleaned penguin and its death was 18 months while for a non-oiled bird the time elapsed was 21 months (Whittington 1999). These findings indicate that the rehabilitated African Penguins had the same chance of survival as the non-oiled penguins. Breading among the cleaned penguins has also been successful which contributes to the growth of the penguins' population (Whittington 1999). Conclusion The efforts made by SANCCOB have proven to be successful in the rescue of the South African penguins. Oiled penguins have the same chance at survival as penguins that were not oiled (Whittington 1999).

An important factor for their survival is that the penguins are able to retain the waterproofing in their feathers that they need for insulation. They are

also able to breed as if they were not affected by the oil spill (Whittington 1999). Planning for incidences such as oil spills is important in effectively tending to the needs of the penguins. Specialists worry that the lack of space in the pools could trigger an epidemic of avian malaria (Singer 2000). With planning they are better able to reduce the fatalities that occur in the initial stages of the rescue, such as providing the penguins with sufficient space in the transport vehicles and obtaining enough motivated volunteers to assist South Africa’s native penguin (Konings 1997). Efforts are being made to hold the oil carriers liable for their negligence in the maintenance of their ships that affect the environment these penguins inhabit (Singer 2000).

Literature Cited KONINGS, CHRIS. 1997. Coastal Oil Spill: Apollo Sea Shipping Disaster–June 1994. Journal of Contingencies & Crisis Management Vol. 5: 118-120. SINGER, RENA.

2000. South Africa’s oil-soaked penguins get a scrubbing. Christian Science Monitor Vol. 92: 7.

WHITTINGTON, P. A. 1999. The contribution made by cleaning oiled African Penguins Spheniscus demersus to population dynamics and conservation of the species. Marine Ornithology Vol. 27: 177-180.