

Water, Oil, Wildlife – A Deadly Mix

Oil spills, illegal dumping kill hundreds of thousands of seabirds each year

by **Laura Ellis**, Media Relations Manager

Most of us have heard stories or seen footage of the devastation created when humans, by negligence or error, cause havoc for wildlife. Few of us, however, have experienced first-hand a disaster of massive proportions. Steven Sarro, the National Aviary's new Director of Animal Programs, has.

Research Center, was swiftly pulling together the largest oiled wildlife response team ever assembled.

Penguins, like other birds, lose the waterproofing and warming capabilities of their feathers when they come in

contact with oil. Because they then cannot hunt for food in the cold waters off the coast of South Africa, the penguins instinctively try to clean themselves, ingesting

Unless situations change, oil spills are a deadly threat to water birds and marine life that will only increase with time.

As coordinator of the AZA (Association of Zoos and Aquariums) Species Survival Plan for African Penguins (*Spheniscus demersus*), Steve is the U.S. zoo world's go-to person for all things for and about the two-foot-high birds with the distinctive waddle and winsome ways.

the toxic oil. With more than 40,000 penguins either caught by the spill or in its path, IFAW and its partners needed expert assistance, and they needed it quickly.

While IFAW's team temporarily relocated 20,000 oil-free penguins from an island in the oil slick's path, Steve, along with zoo and wildlife experts from 14 countries, flew to South Africa where an abandoned railway warehouse had been converted to a penguin cleaning and treatment center. Steve and other team members then spent 17 hours a day cleaning the remaining 20,000 contaminated birds—one at a time.

"The birds were captured in nets and delivered to the warehouse in cardboard crates of three to six penguins," says Steve. "Once the birds were fed and stabilized, we began the process of washing them down with the South African equivalent of Dawn dish soap."

And so in June 2000, when the ore carrier "MV Treasure" sank off the coast of

South Africa, releasing more than 1,100 tons of heavy bunker fuel in an area that supports the world's largest breeding population of African Penguins, Steve got a phone call.

The International Fund for Animal Welfare (IFAW), together with the South African Foundation for the Conservation of Coastal Birds (SANCCOB) and the International Bird Rescue

Asked if the birds became panicky or stressed, Steve explains, "Actually the penguins were relatively calm, particularly when we got them in the warm water rinse. Once they got out of the bath, they immediately began preening, a process that restores the natural layer of protective oil to

Before being caught by the IFAW team, a badly oiled penguin attempts to clean itself, thereby ingesting fuel oil which is toxic to its internal organs.



Photo © International Fund for Animal Welfare / Jon Hrusa



Photo by Steven J. Sarro

Fuel oil coats the feathers of these penguins, who have been removed from the traveling crates and undergone initial assessment.



the feathers. We continued feeding and monitoring them, giving them time to waterproof themselves.”

IFAW and its team rescue efforts resulted in a remarkable 90% survival rate for oiled penguins, with the natural adaptations of the African Penguin helping the species to fare

better than other water birds affected by spills. Penguins have multiple layers of fat to burn for energy, extending their ability to survive during a time when they are unable to swim and hunt for food. Additionally, their temperaments help them cope with handling during a lengthy rescue effort.

Volunteers bathe an African Penguin in detergent to remove the fuel oil.

Steve Sarro, with fingers bandaged to protect against nips, helped pre-fledged youngsters in the “chick room.” Steve and the other volunteers found that the wild African Penguin chicks were considerably underweight compared with zoo chicks, indicating parental difficulty with finding adequate nutrition in the wild.



While the “Treasure” recovery effort was a success story, oil spills continue to be a constant threat to the survival of water birds and marine life that will only increase with an ever-increasing global population’s need for fossil fuels. Illegal dumping of oily bilge water at sea is a chronic problem, killing hundreds of thousands of seabirds each year in areas with heavy shipping lanes. While some countries have made efforts to move tanker routes further off-shore,



Each room in the interior of the warehouse was the size of a football field. The vast space was divided into pens with 60-70 birds in each pen. Altogether, 20,000 oiled penguins or chicks were cared for at the SANCCOB site and the Salt River site.



Photos this page by Steven J. Sarro

ongoing illegal oiling still occurs globally, particularly in areas such as the North Sea/Baltic Sea region, the eastern coast of South America including Chile, Argentina, Uruguay and Brazil, the southern tip of Africa and eastern Canada.

“It was the most rewarding—and the hardest—task I’ve ever taken on,” says Steve. *“I never want to repeat it again, but I know I probably will. Other oil spills are inevitable unless conditions change.”*

ON THE COVER: A volunteer holds an injured penguin being treated at the Salt River Centre in Salt River, South Africa. Several other penguins surround the volunteer.

Penguin chicks weren’t directly affected by the oil spill since they were still living on the nesting island and not swimming yet. But with their parents affected, they had to be captured and held temporarily so they could be fed and cared for. This hungry resident of the “chick room” looked to Steve and the others for fishy meals in lieu of mom and dad.



Photo by Saeen J. Sarro



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Many months of grueling work on the part of the response team led to a mostly happy ending—this time. Cleaned penguins waded into the surf after being released by IFAW staff at Milnerton beach in South Africa.

HOW YOU CAN HELP:

- **Sponsor an African Penguin at the National Aviary** and help us continue our participation in the African Penguin Species Survival Plan. Call 412-323-7235 ext. 235 or see www.aviary.org.
- **Become a Seafood Watcher!** Learn how to make sustainable seafood choices when you shop and dine. More information on our website, or pick up a wallet-sized Seafood Watch guide the next time you visit the National Aviary.
- **Learn more about ongoing international efforts to rescue penguins and other sea birds from the effects of oil spills** at www.ifaw.org and www.sanccob.co.za.

What Is The African Penguin SSP?

The African Penguin SSP is one of 107 Species Survival Plans, covering 161 species, administered by the Association of Zoos and Aquariums. The AZA established the SSP program in 1981 to help ensure the survival of selected wildlife species by keeping track of the genetics and demographics of individual animals.

The SSP master plan for African Penguins looked at the overall population of birds in captivity and at how each individual bird is related to the rest of the population. From this assessment, the steering committee recommends breeding pairs with the goal of improving the genetic health of the African Penguin population as a whole.



But careful breeding is just one role of the SSP. Often zoos and aquariums need penguins for education, outreach and interactive programs. For example, the SSP recommended the hatching of Stanley, Elvis, Patrick and Simon for the National Aviary. These popular birds serve as ambassadors for all wild penguins in the natural world.

The African Penguin SSP Steering Committee also addresses conservation concerns in the wild by working closely with SANCCOB in South Africa, the leader in oil spill response work, and others.