



Joseph S. Spinelli, D.V.M.  
Veterinary Advisor, San Francisco Joint Zoo Committee

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## **Report on the Environment for Bears at the San Francisco Zoo January 11, 2010**

### *Introduction*

On November 9, 2009 Sally Stephens and I visited the bear exhibits to evaluate their physical environment and level of care, with a focus on environmental enrichment. This document reports my impressions from that visit. Sally is welcome to offer her own comments on what we observed and how she interpreted those observations.

We inspected the bears because several reports were critical of the way the bears were housed. While all bears were observed, there was a special emphasis on the polar bears. We were accompanied by Deb Cano and I was extremely impressed by her dedication to provide the bears the best care she could, given the limitations of the physical plant in which they are housed.

### *Environmental Enrichment*

When animals are kept in captivity, if they are not provided some level of enrichment in their environment, they may develop mental distress that is often presented by abnormal behaviors. Such behaviors include, but are not limited to, pacing, self-mutilation, tics or tremors, excessive lethargy, or excessive aggressiveness. These signs can be caused by other conditions as well.

In nature animals tend to spend a significant portion of their time searching for food and avoiding predation. These two activities are not major issues for animals in captivity. Therefore, such animals have excessive time on their hands. While idleness is the Devil's workshop in humans, it also is tough on animals. One approach to prevent mental distress from "boredom" is environmental enrichment. Such programs may include hiding feed, providing toys, making anywhere from minor to major changes in the environment, providing species appropriate companionship and providing sensory stimulation.

### *Findings*

When the WPA constructed the bear grottos and associated areas they were probably state of the art for that era. At that time many zoos kept bears in cages. The grottos were an improvement over that. Today we look at the grottos as a rather sterile environment that provides little, if any, opportunities for enrichment. Zoo staff have made efforts to counteract this.

The polar bears are in two groups. One group consists of a solo bear, Ula, who was born in the wild and became a captive animal when her mother was killed for being a nuisance bear. The other group consists of two bears, Pika and Andy, who were born in captivity and raised by humans. All of the polar bears are old, in their late 20's.

When we visited the displays I saw no evidence of stereotypic behavior. However, Pika and Andy appeared to be lethargic. Staff have modified the grotto in which Ula is housed. There is a dirt pt in that grotto and Ula plays in the dirt and with vegetation to the extent that it is difficult to know she is white. Andy and Pika are occasionally given shaved

ice and they play with it. Ula is adverse to ice and Andy and Pika don't like the dirt. The staff hides feed for all of the bears. In the grizzly area live fish are placed in the stream that runs through their enclosure. One of the major enrichment activities has been discontinued by the zoo. That is patrons feeding the bears.

At a minimum the two grizzlies are trained to present their backside for veterinary injections. This not only makes treatment less stressful for the animals as well as the veterinary staff, it also provides positive human animal-human interaction.

To provide enrichment for their environment, staff have recommended rotating bears from the grottos to the grizzly exhibit.

### *Recommendations*

- Upgrade the bear enclosures to meet the needs of the species housed. It may be possible to keep the existing indoor facilities.
  - Annually provide the Joint Zoo Committee with both long range and short term plans for capital improvements.
- When obtaining captive raised animals, minimize human contacts with newborns so the animals develop appropriate species-specific behavior.
- Because of their advanced age, do not consider relocating the bears to other institutions.
- Continue to seek opportunities for environmental enrichment in the existing facilities.
- To safeguard the animals' health continue the policy of preventing patrons from feeding the bears.
- If they have not already been so trained, teach the other bears to present for veterinary activities.
- Explore the possibility of rotating bears between the various exhibits. However, also closely observe them for negative effects.
- Explore the possibility of using graduate students for enhancing and evaluating the zoo's environment enrichment program.
- I will be willing to respond to one concern a month regarding veterinary issues.