Behavioral Enrichment 101

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This is an article for all the new care givers, who have just now started working with animals and are getting acquainted with the concept of exactly what "giving care" means. I have found that it registers in all kinds of levels in the zoo keeper's mind. For one thing, "old school zoo keeping" does not require more than the basic husbandry in the every-day routine. Even now in the 21st century, some care givers believe maintaining exhibits and servicing animals is all that is required in their eight-hour routine. Behavioral enrichment is not required and is considered something that can be done after regular duty, if time allows.

In my opinion, there is much more to Behavioral Enrichment, and it should be discussed at a higher level and with new keepers, so they can fully understand its value.

In this article, I will begin by asking what Behavioral Enrichment is and why the animals need it. I will then talk about the specifics of planning and implementation.

What is Behavioral Enrichment?

Behavioral Enrichment serves to promote the psychological well-being of captive animals by enriching their environment. Behavioral Enrichment provides an appropriate environment that promotes natural activities. The stimulation breaks down to several different levels – like Exhibit, Dietary or Social Enhancement and can be used in many forms.

Why do the animals need it?

Regardless of an institution's financial circumstances or its commitments to animal welfare, there is no way to re-create all the natural behaviors of the animals in the collection. No matter how well an exhibit is designed, or with the inclusion of the most modern behavioral architecture, what may be pleasing or attractive to the human eye will not necessarily meet the behavioral needs of the exhibit animal.

The fact that they have to interact with humans at all causes the animal to assume behaviors that may be deviant in comparison to their wild counter-parts. For example, we put them on feeding schedules, altering such things as foraging time, their choice of foods, and their eating patterns. We clean their exhibits. We move them around, introduce or separate them from other animals, medicate or euthanize them, in short, making most of their life decisions for them. To some degree their housing and social setting will always be inappropriate and this can cause aggression, boredom, and physical or psychological illness. It is the keeper's responsibility as the animals' primary caretaker, to attempt to decrease these problems.

How do we begin?
Behavioral Enrichment is a two-way street. It not only benefits the animals but it also increases the keeper's knowledge of their animals.

Keepers need to:

- Research the natural behaviors of their animals
- Observe the behavior in captivity
- Talk to each other about behavioral problems they are experiencing with their animals
- Organize their research to arrive at the best solutions for the behavioral enrichment of their animals
- Read the professional news letters such as:
  - *The Shape of Enrichment* (published quarterly), Shape of Enrichment, Inc., 1650 Minden Drive, San Diego, CA 92111-7124 USA shape@enrichment.org
  - *AAZK Enrichment Notebook*, http://www.aazk.org/aazk
- Refer to related Internet websites like:
  - The Animal Welfare Institute at http://www.animalwelfare.com
  - The Exotic Animals: Care and Conservation Resource Website located at http://www.pacificnet.net/~jmcnary
  - The Cambridge Center for Behavioral Studies and the Animal Trainers SIG of the Association for Behavior Analysis have put together an excellent overview of the many ways that positive reinforcement techniques are being used by professional animals trainers and in zoos, http://www.behavior.org/animals/
  - The Shape of Enrichment, http://www.enrichment.org
- Attend regional and national AZA and AAZK conferences

**How do we apply it?**

A keeper may have to work within the confines of their zoo's policy when it comes to using only natural appearing objects versus unnatural ones. If only allowed to use natural materials, a keeper still can be creative with enrichment. They can present a diet in different form, change exhibit furniture to give it a different appearance, and when possible they can juggle animals around in their night quarters, increasing the available space or exposing them to another animal's den.

Introducing urine and fecal droppings of other species into the exhibit space is a simple, no cost, idea that can have a remarkable effect on many animals.

Tree logs or branches can be given to an animal from outside their own exhibit, creating visual novelty and presenting different smells that may be interesting to an animal.
Natural materials lying around on zoo grounds are a possible source of enrichment, diet addition or provide playing and hiding materials. For example: pine cones, fruits, bean pods and browse or feathers, shed snake skins, or different soils.

Donated goods such as discarded Christmas trees, Halloween pumpkins and cacti can also be utilized.

In the night house there is more freedom to get creative, using items that may not be acceptable on exhibit but will serve the dual purpose of Behavioral Enrichment and that of recycling materials – i.e., cardboard boxes, paper bags, newspapers, shredded papers, old clothing and telephone books.

The keeper has to keep in mind that one does not want to alter the animal's exhibit or night house to the point where it confuses or scares the animal. They need some consistency as well as change.

**What works, what doesn't work?**

In order to determine your successes or failures with Behavioral Enrichment you need to keep ongoing records of what additions or materials are being used by the animals. A good method of doing this to keep a book or journal that summarizes and evaluates the Behavioral Enrichment techniques you are utilizing.

Behavioral Enrichment is not a new concept in zoos, but its importance is being recognized more and more worldwide. Enrichment Committees are being established to test and evaluate various forms of enrichment. Some institutions are appointing behavioral managers, or behavioral curators, whose job it is to identify and document behavioral problems, generate training and enrichment solutions, training new employees, and making behavioral policy decisions.

As my very last thought, keepers have to remember that cleaning and feeding may seem like satisfactory care giving, but giving care just has to stretch a little bit further. One can scrub and clean all day and keep animals in hospital-clean circumstances and they will exhibit abnormal behaviors. Captivity is the reduction of natural stimulations. It is the keeper's goal to change what the animal experiences in its captive environment on a regular basis and make captivity bearable for them.

Behavioral Enrichment only works when it is incorporated as part of the daily routine.

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