



It is now time, so let us start Workshop II.

Before we begin, I would like to thank everybody for taking their time to attend this workshop. This workshop is about the current situation of enrichment in zoos, and

we are here to discuss issues regarding zoos.

I am Yoshikazu Ueno from the Higashiyama Zoo & Botanical Garden. I will be chairing this workshop.

The following is a brief outline of the workshop. First, I would like to briefly explain the idea of enrichment. Then we will have Dr. Mason fully explain the concept of enrichment by providing different examples. After this, Mr. Suzuki and Mr. Horii will speak about the actual practice of enrichment in zoos.

After each speaker, we will be taking any questions that must be asked at that point, but we will run out of time if we hold a long discussion for each question. Thus, we will hold discussions in the end in the form of a general discussion. So, please take notes as you listen on any doubts you have or any issues you would like to point out, and during the last part of the workshop we will have an active discussion based on these notes. Thank you for your cooperation.

Now, first, I would like to briefly explain how to capture the idea of enrichment.

First, when thinking about zoos, I would like to point

out the fact that the role of current zoos have changed considerably compared to the role of zoos from 30, 40 years ago, or from even longer ago. Before, zoos were simply thought to be facilities where animals were exhibited. Thus, zoos were mainly for entertainment. In this way, for a long time zoos had the role of a “show tent” although this may be an inappropriate word to use. This is seen in the Japanese expression “pandas to attract customers” meaning zoos should make a show of such rare animals. However, this does not apply to the role of current zoos; current zoos are considered as an “interface to nature.” [slide 2]



【Slide 2】

Then, what does “interface to nature” mean? Although this must be in quotes, the essence of animals is not nature in itself. The idea is to have animals behave in the way they want to within the limited environment and to understand animals or the interaction between the animals and the environment by watching these animals. Needless to say, this idea will affect the method of exhibition itself. It is not enough to simply have animals in cages, and the way in which these animals are produced as exhibitions will also change greatly. This idea of the interaction between animals and their environment is also a theme of great importance.

So, as written below, the role of zoos is to understand animals and the natural environment and to communicate this information and send out this message. This is what is meant by “interface to nature.”



【Slide 1】

Until now, I have been talking from the perspective of the visitors of zoos, but we also must consider the quality of life from the perspective of animals living in the facility. In order to show how the animals live and behave, we must improve their quality of life; in other words, we must consider the improvement of animal welfare. [slide 3] [slide 4]



【Slide 3】



【Slide 4】



【Slide 5】

Environmental enrichment is considered as a practical method that improves the quality of life and the welfare animals. There are many perspectives regarding this idea, and I think that the different perspectives will be covered by the detailed presentations that will follow,

so I will not speak about this in detail. However, please keep in mind that environmental enrichment is one practical measure.

So, environmental enrichment serves to enhance the function of the environment. It does not mean simply putting anything into the environment. Many stakeholders of zoos say that it is difficult for them to perform enrichment because they have no money to renovate the facilities. Of course, renovating the facility is one way of enrichment, but the facility does not necessarily have to be rebuilt for enrichment. Being creative during the daily routine of feeding the animals is also an important aspect of enrichment. In this way, it is important to consider the software, not only the hardware, and be creative. These things lead to the consideration of the quality of life of the animals.



【Slide 6】

I want everybody to have an image of what I am talking about, so I would like to introduce several examples. This is a chimpanzee in Higashiyama; until last autumn, the chimpanzees were in an orthodox exhibition area with nothing. Chimpanzees are arboreal species, but in an orthodox exhibition area, they are unable to climb trees, so most of the times, they lie on the floor spacing out. We thought of improving the function and considered improving the three dimensional function. Of course, it would be the best if we can make a jungle inside the exhibition, but since that was impossible, we made an artificial tower in this example. For the animals, artificial does not necessarily mean something detrimental. The most important point to consider is how to satisfy their functions.

This is what happened when we actually made the tower for the chimpanzees. This is the first day that the chimpanzees were released into the exhibition area. In

the beginning the chimpanzees were excited, but several of the chimpanzees started to climb immediately or started using the ropes or the platform. So the chimpanzees that have been lying on the floor having nothing to do started to run around lively. They were able to lead lives like chimpanzees – in other words, they were able to lead arboreal lives. This is an example of enrichment from the aspect of hardware. [slide 6]



【Slide 7】

Next, I would like to talk about an example from abroad. This is an example from Bronx Zoo located in New York in the United States. This example is one about the tiger mountain, an exhibition of tigers. The exhibition is rich in nature, but this does not mean that the tigers can lead a good life. Of course, environments rich in nature are important. However, it must be noted that the zoo keepers hide food in these ways or use wires to hang chunks of meat to hide on a daily basis.

Also, this is jelly that contains blood. Also, here, the zoo keepers are sprinkling scents. They are sprinkling scents of things such as spices and perfume in various places in the area. The zoo keepers are artificially mocking the behavior of tigers where they leave their own scent in their territory. When tigers are released in these areas, they would be interested in the food, or, that was a marking behavior of a tiger. The tiger was stimulated by the smell, and marked the place with its own smell meaning that this area is its territory.

Also, the environment draws out the behaviors of tigers such as marking its territory by clawing. Tigers are not exhibiting these behaviors because of all the greens and nature; they are exhibiting these behaviors because the zoo keepers are doing creative things that would be called enrichment. When tigers do this marking behavior in front of the visitors, the visitors

will be entertained by this. I think that it is stimulating for the tigers and fun for the visitors as well. [slide 7]



【Slide 8】

This is a gorilla; as you can see, there is a lot of food on the ground. The food is scattered all over the place. This is because the zoo keepers spread the food all over the place before releasing the gorillas into the area. The gorilla will have to look for food before eating.

This can also be enrichment.

I am being repetitive, but enrichment is not necessarily making something like a big building; that is, it is not necessarily doing something with the hardware. In Japan, generally enrichment is thought of in this way, but this is not necessarily true.

Enrichment has aspects that deal with the hardware, but there are also many creative things that can be done from the aspect of daily management of the animals.

Of course, there are aspects that are good for the animals; however, it is not only good for the animals but it also draws out behaviors that are fun for the visitors to watch as I have shown with the example of the tigers. In this way, zoos are not just for showing animals but for showing the behavior and the lives of the animals and their interaction with the environment. These are the roles of zoos. Considering this, enrichment is a very important technique for husbandry. [slide 8]

So, from here we would like three speakers to talk about this concept in detail.

First, we would like to hear from Dr. Mason.

While she is preparing, I would like to give a brief history or an introduction of Dr. Mason.

Dr. Mason has been researching for a long time in England, and currently she is researching in Canada. She has many papers on topics such as animal welfare and enrichment published in high quality journals



such as the Nature and the Science. She is young but is a researcher who draws attention. In this regard, she is one of the leading researchers in this area internationally.