Research Activity Report
Supported by "Leading Graduate Program in Primatology and Wildlife Science"
(Please be sure to submit this report after the trip that supported by PWS.)

	2021. 12. 27
Affiliation/Position	Wildlife Research Center/D2
Name	Lim Qi Luan

1. Country/location of visit

Kyoto City Zoo, Japan

2. Research project

Animal Welfare Course

3. Date (departing from/returning to Japan)

2021. 12. 12 – 2021. 12. 14 (3 days)

4. Main host researcher and affiliation

Dr. Yumi Yamanashi, Chief researcher at the Center for Research and Education of Wildlife, Kyoto City Zoo

5. Progress and results of your research/activity (You can attach extra pages if needed)

Please insert one or more pictures (to be publicly released). Below each picture, please provide a brief description.

Due to personal reasons, I was not able to attend the briefing and lecture on the first day (Dec 12, 2021) and the animal observation sessions in the following two days.

Dec 13, 2021

Figure 1 Making a rock structure using wire mesh

Nonetheless, I was able to help creating an artificial rock that was to be put in the pool for the penguins to climb. This was for the purpose of environment enrichment as a way to improve animal welfare in the zoo. First, we used metal wire mesh and plastic tie locks to create the outline of the shape of the rock that we wanted to make (Figure 1). Then, we stuffed some newspapers into the interior of the mesh structure. We mixed the sand and cement powder at a ratio of about 3:1 with water to make a sand cement mix to be spread on top of the rock-shaped net structure (Figure 2).

Figure 2 Making of the artificial rock

Figure 3 Plowing the earth in the Flamingo enclosure

Next, we were led to flamingos' enclosure to plow the ground (Figure 3). The plowing was done with hoes or spades to soften the soil, which was done to reduce the burdens of hard soil surface to the birds' feet. It was also important to not leave large chunks of soil after plowing as the birds might trip over them.

Figure 4 Moving sand into the gorilla enclosure

After all the hard works, we went to the gorilla enclosure to conduct the next activity of enclosure maintenance. The sand inside the enclosure dissipates with time, therefore timely maintenance is required. We were instructed to move the two piles of sand into the closure with wheelbarrow (Figure 4). The zoo staffs then distribute the sand around the enclosure area (Figure 5). We then called it a day after moving all the sand into the enclosure and cleaning up.

Figure 5 Maintenance of the gorilla enclosure

Figure 6 Continue the making of the artificial rock

Dec 14, 2021

There was not much works in this day compared to the day before. We continued the making of the artificial rock. We mixed cement and water to spread on top of the sand cement layer (Figure 6). The artificial rock was left to dry before used. The other members were also tasked with the making of a hammocks, feeders, and wooden stand for the animals (Figure7-8).

Figure 7 Feeder (front) and hammock (back) for the gorilla

Figure 8 Stand for the peacocks

*Please have your mentor check your report before submitting it to [report@pws.wrc.kyoto-u.ac.jp].

6. Others

Although I was not able to take part in all of the course content, I had an invaluable experience learning the importance of enclosure maintenance and enrichment for the welfare of the animals in the zoo. I was also amazed by the zoo staffs to improve the welfare and health of the animals in the zoos. It was not easy I hope this experience will benefit me in the future, when I would be more involved with working with the zoo animals for scientific research and studies.