Research Activity Report
Supported by "Leading Graduate Program in Primatology and Wildlife Science"
(This report must be submitted within two weeks of the end of your PWS-sponsored trip.)

	2025/10/24
Affiliation/Position	Wildlife Research Center/D1
Name	Elizabeth Ferreira

1. **Country/location of visit**

Japan, Kumamoto

2. **Research project**

Animal Welfare Course

3. **Date (departing from/returning to Japan)**

2025/10/20 to 2025/10/23 (4 days)

4. Main host researcher and affiliation

Dr. Hirata Satoshi, Professor and Director of the Wildlife Research Center

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

Day 1:
On the first day, we arrived and got settled in our rooms. We received some working clothes to wear, and then we began a tour of the facility. The facility is quite large with many buildings, and we got to observe chimpanzees and bonobos. Hirata-Sensei informed us about the history of the sanctuary and the animals, along with management practices. One interesting fact I learned was that the sanctuary has more males than females. Females were very desirable to zoos because they could have babies, so research companies could easily sell them.


Photo 1: Students arrive and get settled at Kumamoto Sanctuary.

After our tour ended, we got to know a chimpanzee group that we would feed breakfast and dinner to daily. We helped to chop their allotted fruits and vegetables into smaller pieces, and observed as Hirata-Sensei brought the chimpanzees inside to eat. After giving them their food, Hirata-Sensei would engage the chimpanzees in a short training session, asking them to present their sides. Hirata-Sensei would then poke them. This training is beneficial if the chimpanzees need a shot. It can help to reduce the stress from receiving the shot and is good for their health.

Day 2:
In the morning of the second day, we returned to the chimpanzee group and again cut up the chimpanzee's diet. Students were able to place the diet in the outdoor enclosure after the chimpanzees were brought inside. It was interesting to walk around inside the enclosures, and we spread the food in high and low places to make it more enriching for them to find. After we finished their breakfast, we returned to the main building, where Tsumura-San and I gave a presentation about enrichment and animal welfare. Enrichment is items that allow animals in captivity to exhibit species-specific behavior. Enrichment can improve welfare, and it is a very important part of captive animal health.

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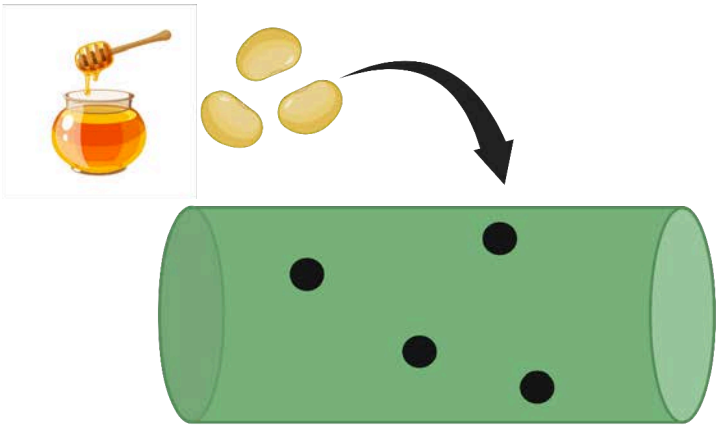
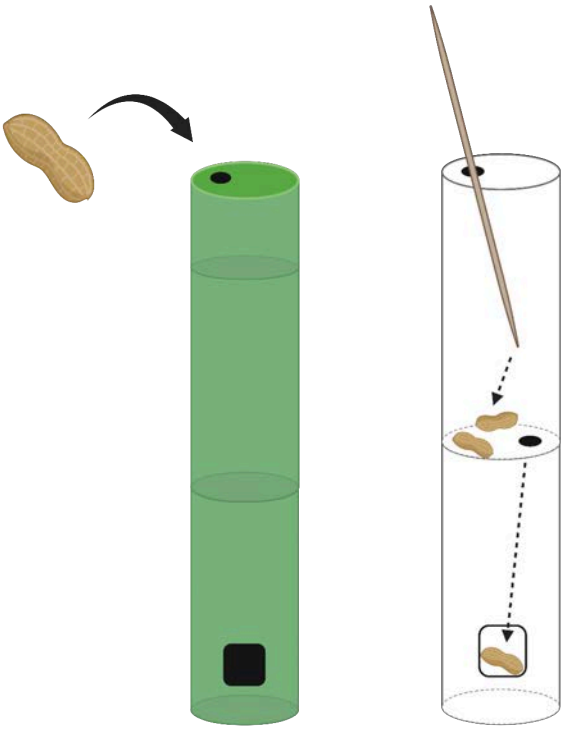
Figure 1



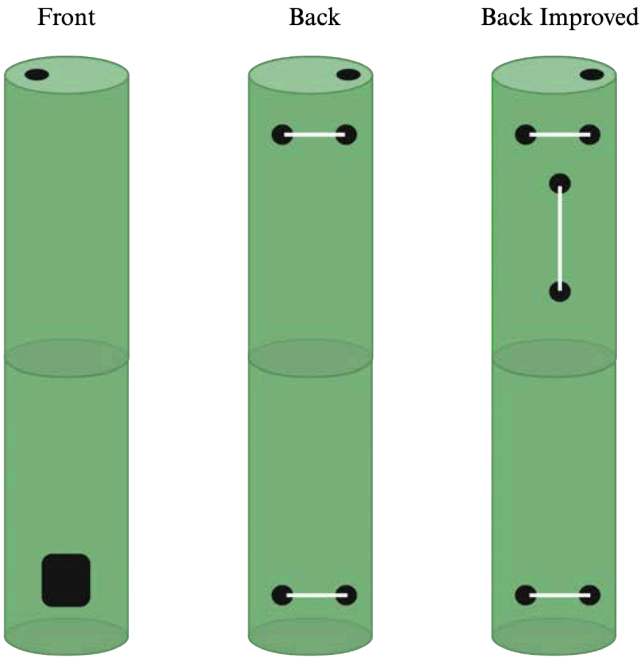
After the presentation, we went outside to an area with bamboo and began cutting down bamboo to make enrichment items for the bonobos and chimps. We had a plan to make two kinds of enrichment. The first was a thinner piece of a single bamboo segment (Figure 1). We drilled holes into these segments and filled them with honey and soybeans. We hoped the primates would use tools to fish out the food items inside. The second enrichment was a bit more complex (Figure 2). We chose thicker bamboo shoots for this item, which included two bamboo segments. We drilled a hole in the top fushi and the middle fushi to make a puzzle feeder. The idea was that primates would use a stick to move the peanuts inside to the lower bamboo segment where they would reach them.

Figure 2



We gave our enrichment to the bonobos and watched their behaviors. The bonobos were very strong. While we observed a few instances of tool use for the smaller enrichment items, bonobos were able to rip open the bamboo and get the food inside. Similarly, bonobos realized that if they vertically shook the larger enrichment item that had been attached to the enclosure mesh, peanuts would fall through the puzzle feeder without the need for tools. After some time, the bonobos were also able to rip the puzzle feeders off the mesh or use the lip of the top fushi to open the puzzle feeders by force.

Figure 3



Since we had given all of our enrichment to the bonobos, we spent the rest of the afternoon making more enrichment for the chimpanzees. My group made two improvements to the larger puzzle feeders. First, we added a vertical reinforcement that could be used to limit the ability of the primates to shake the puzzle feeder vertically (Figure 3). Second, we cut the bamboo very close to the fushi. This meant that if the chimpanzees tried to bite or pull the puzzle feeders off the mesh, they would not be able to get a good grip. Hopefully, this would lead them to use tools to get the peanuts from the puzzle feeder.

After finishing our enrichment, we helped feed the chimpanzees dinner.

Day 3:
After feeding the chimpanzees breakfast, we filled out puzzle feeders with beans, honey, and peanuts (Photo 2). While the chimpanzees were inside, we entered the enclosures to place the enrichment. After the smaller enrichment and larger enrichment were placed, we observed how the chimps interacted with the items.

Photo 2: Students filling enrichment items with honey, beans, and peanuts.

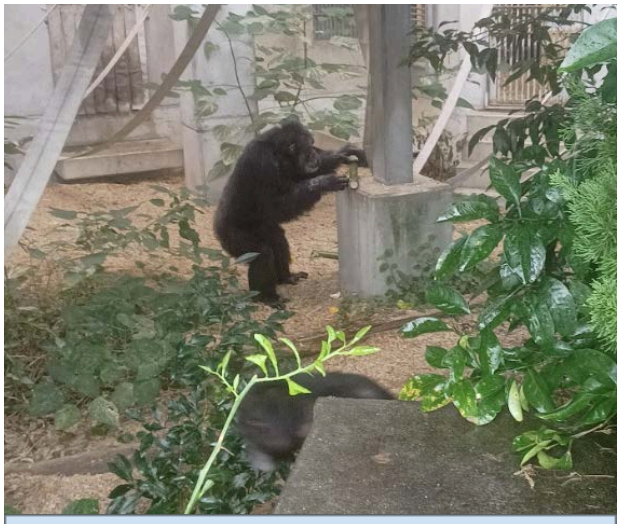


Photo 3: Chimpanzees interacting with enrichment items.

Similar to the bonobos, chimpanzees were able to bite open the smaller enrichment items. They were also able to rip the larger puzzle feeders off the mesh enclosure. Sadly, because of how the enrichment was attached, we were unable to use the vertical reinforcements, so it's unclear if they worked. Chimpanzees did shake the feeders vertically to make the peanuts fall down. What we did observe was that no puzzle feeder with the shorter lip was pulled off the mesh. Puzzle feeders with the longer lip on the top of the feeder allowed for chimpanzees to pull or bite open the feeder. It was nice to see that our improvement worked. I hope in the future I can return to Kumamoto Sanctuary and test the vertical reinforcement with the bonobos.

Later in the evening, we prepared a barbecue.

Day 4:

On the last morning, we cleaned our rooms and departed the sanctuary.

Other:

I feel grateful to PWS for funding this opportunity and to everyone who made it possible. Thank you so much to the staff of Kumamoto Sanctuary for hosting us. They took time out of their busy schedules to coordinate with the students so we could deploy our enrichment and observe primates. I appreciate them taking the extra time to organize themselves so we would have that opportunity. Thank you to Hirata-Sensei for leading this course. From the rental car to group meals to course activities, there was a lot to manage, and you made it wonderful for us. Thank you to all participating WRC students for being great company on this adventure. Kumamoto Sanctuary is a special place, and I hope to return one day.