Research Activity Report Supported by "Leading Graduate Program in Primatology and Wildlife Science"

	2025. 03, 05
Affiliation/Position	Wildlife Research Center/M1
Name	Casey Mack

1. Country/location of visit

Kumamoto Sanctuary, Japan

2. Research project

Animal Welfare Field Course

3. Date (departing from/returning to Japan)

2025.02.26 - 2025.03.01

4. Main host researcher and affiliation

Hirata-Sensei, Professor at WRC

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

Day One:

On the first day, we took a tour of the facilities and the animals living at Kumamoto Sanctuary. During the tour, Hirata-sensei taught us about the background of the chimpanzees at the facility, and how Kyoto University took over this facility from a medical research company.

Then, we observed the evening feeding of one group of chimpanzees. We discussed the importance of separating certain submissive individuals and pairings to make sure that everyone gets to eat, and the dominant individuals don't steal their food. We mixed birth control into juice and bananas for the females living in a group with a male, since Kumamoto is a sanctuary, and they are not looking to breed more chimps!

While the chimpanzees were inside for dinner, we checked and fixed the outside computer apparatuses, since they had not been used for three years.



Figure 1 Setting up touch screen apparatus

Day Two:

On the second morning, we went to feed the chimpanzees breakfast at 8:00. During breakfast time when they are inside, we observed Sensei checking the swelling of the females' buttocks, as this is a sign of fertility in their menstrual cycle. The females know the command to turn around and display for the keepers to check, before being rewarded with a banana! While the chimps are eating breakfast inside, we scattered fruits and vegetables around the outside enclosure, so they can forage for some enrichment while eating. This foraging prevents boredom and exercises the natural foraging instincts of the chimpanzees. We attended the daily sanctuary-wide morning meeting, where keepers and researchers share if they have any announcements or noticed anything new or strange with the animals. They also communicate through walkietalkies throughout the day, but it is important to share news or observations with everyone when caring for animals in captivity, because the animals may behave differently for each person.



Figure 2 Cutting down bamboo stalks

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We also cut down bamboo from the forest to make enrichment toys and trees for the chimps, before heading to the crow house. At the crow house, Itahara-san taught us about the logistics of captive crow keeping. He explained the multiple rooms in the house for the crows and instructed us to try to stay together as a group, so the crows can escape to the other side of the enclosure to avoid humans and avoid getting stressed. We performed some maintenance on the crow house, including repairing boards and nets that have been pecked,

and adding fresh sand to the ground. Maintenance like this is important for the safety of captive animals. Then, we added some bamboo enrichment for them to play with, as well. We placed a camera in the enclosure to observe the birds playing with the enrichment, because they did not want to play with them while we were there.

We completed some touch-screen training again with the chimpanzees. In addition to research preparations, this is a good enrichment activity for them!



Figure 3 Trying a touch-screen task for humans and chimps

On this night, we discussed the cognition and memory tasks the chimpanzees will be tasked with in the upcoming months. We even tried the human touch-screen task, and none of us could figure out the pattern, so we are curious to find out if the chimpanzees can figure it out or not. We talked about the potential differences in long-term and short-term memory between humans and other apes as well as the reasoning and pattern-searching between individuals.

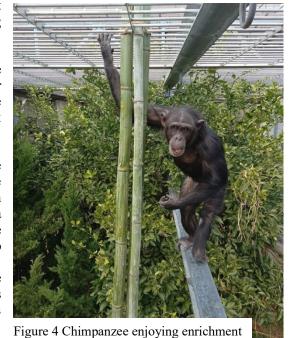
Day Three:

This morning during breakfast feeding, we added juice to some tubes attached to the outside of the enclosure. To drink it, the chimps created tools, crushing the end of some hay to make a brush, to dunk this in the juice and get a satisfying amount. It was interesting to see how successful each chimp was at this task, as we got to know each of the individuals' personalities. I could also start noticing some eating habits that differed between the chimps as I began to realize their different personalities. For example, Hatsuka was regarded as the most submissive of the group. She was always very careful and picky with her food, peeling the skin off everything (even tomatoes and carrots!) and spitting out the seeds instead of eating them. This made her

a much slower eater than the rest of the group, so it made sense that the keepers always separated her during feeding.

On this day, we built the bamboo-tree enrichment in the enclosure and tied three trunks of bamboo together for each 'tree.' Immediately after seeing the new trees, the chimps started attempting to untie the knots and kick down the trees. At least they were entertained.

Then, we met the bonobos, who were sent to the sanctuary from the San Diego Zoo. They are troublemakers! We discussed how this species lives in groups led by females, and having multiple females in a group with males can lead to the females bullying the males in the group. At the sanctuary, there is one group of males with one female, and one group of all females. Apparently, the female bonobos sometimes make trouble for the male keepers, and vice versa. This intrigued me, because it seems their sex-bias transfers to other species!



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Overall, this course was very interesting and enlightening for me. I learned a lot about chimpanzees, as well as captive animal welfare and had many informative discussions with Hirata-sensei and the other student-researchers at the sanctuary.



Figure 3 Chimps at the touch screen station

6. Others

I would like to thank Hirata-sensei for taking myself and Xorlali on this field course and sharing his knowledge with us. He answered so many questions and enlightened us on captive animal operations as well as all about chimpanzees!

Then, I thank the Kumamoto Sanctuary staff for accommodating us and helping with our enrichment activities.

Of course, I would also like to thank Matsuda-Sensei and the PWS committee for their support, and my fellow student-researchers for their hard work.

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