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

	2015. 03, 16
Affiliation/Position	Primate Research Institute/ D2/L4
Name	Bernstein, Sofia

1. Country/location of visit

Shodo-shima, Japan

2. Research project

Shodo-shima Study Tour

3. Date (departing from/returning to Japan)

2015. 03. 12 – 2015. 03. 14 (3 days)

4. Main host researcher and affiliation

Dr. Hayakawa, Professor at Primate Research Institute

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.

During the course of this trip I observed the "tolerant" Japanese macaques at Choshikei Park. Another aspect of this trip was collaborating with other students to organize the tour planning and group activity. My job consisted of planning the activities for the day (March 13th) in Shodo-shima and counting the group to make sure we stayed together during the trip. It was a wonderful experience which I enjoyed very much. It was particularly interesting to see the clustering behavior specific to the macaques at Choshikei.

On the first day we took the opportunity to visit Himeji castle before departing on the ferry to Shodo-shima. Himeji castle is a World Heritage Site, and one of the three most famous castles in Japan. Unfortunately, part of the castle was under restoration, so we were not able to enter the castle. We did walk around the grounds and enjoy the fantastic views of the castle. It was also an opportunity to learn about a classic ghost story in Japan about Okiku and the famous well there. I had visited an exhibit on famous ghost stories in Japan last year in Nagoya, and I could remember learning about Okiku there and the famous well. From there we traveled on the ferry to Shodo-shima. On the ferry we could see a cartoon character named Shima-chan, who is in the shape of an olive. Shodo-shima is famous for their olives, and there were olives drawn on the ferry.

During the second day we traveled to Choshikei to visit the macaques. The set up was similar to my experience at Arashiyama were tourists can enter a hut and feed the macaques. It was a large park and I also saw deer among the macaques. Around 10:30 we watched one of the famous monkey shows, where Ai-chan and her trainer performed a series of tricks during the performance. I had never observed one of these shows but knew this was a tradition in Japan. It was interesting to watch, and learn about how the monkeys (all female) are selected as performers and how long the training process takes. What worried me throughout the performance were the self-directed behaviors by Ai-chan. She would bite at her shirt from time to time and grimace. Her shirt was covered in holes, so I surmised she was trying to take the clothing off.

After walking around the grounds we were able to observe the group forming a cluster at 13:29 PM, and the alpha male seemed to initiate the cluster by lip smacking and vocalizing. There were approximately 25 adults and four yearlings in the cluster. They huddled and the alpha male went around the cluster removing certain females and soliciting others to join. The cluster dispersed at 13:55 PM. After observing the cluster a few students and I hiked to the summit by the monkey park and enjoyed the view of the island.

A group of students and I enjoyed a nice walk back to the hotel after staying at the monkey park most of the day. We observed a nice waterfall and a river running adjacent to the park. Once returning to the hotel I enjoyed my first time at a Japanese onsen. Dinner was wonderful and it was a great opportunity to taste the famous olive oil from the region.

On the last day part of the group returned to Inuyama, while the rest of the group traveled to Kochi for a Zoo University

Symposium. I was part of the group that traveled back to Inuyama. I thoroughly enjoyed my time at Shodo-shima, and am grateful I had the opportunity to participate in this field course. I would like to thank Dr. Hayakawa for presenting this trip to the students, and all of the students who participated on making this trip special and a wonderful memory.

6. Others

A group of students and I pose in front of Himeji Castle.

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

Enjoying the view of Himeji Castle.

Okiku's well.

Olives painted onto the ferry to Shodo-shima.

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

The students feed the macaques at Choshikei monkey park.

A deer at Choshikei monkey park.

The trainer and Ai-chan.

The view from the summit at the monkey park.

Clustering behavior.

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

	2015. 03, 17
Affiliation/Position	CICASP Research Student
Name	Kristy Kelly

7. Country/location of visit

Himeji and Shodoshima, Japan

8. Research project

Observation of Shodoshima Japanese Macaques

9. Date (departing from/returning to Japan)

2015. 03. 12 – 2015. 03. 14 (3 days)

10. Main host researcher and affiliation

Dr. Yumoto & Hill, Professors at Primate Research Institute, Kyoto University

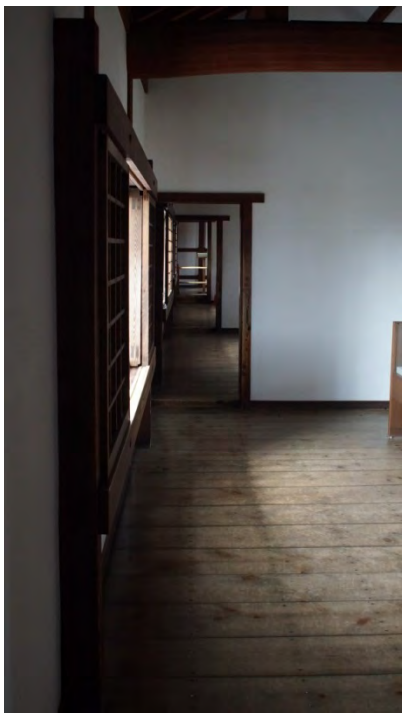
11. Progress and results of your research/activity (You can attach extra pages if needed)

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

In March 2015 I joined 16 follow students on a student-organised trip to Shodoshima Island. To reach Shodoshima we travelled by ferry from Himeji, so we were able to take the opportunity to stop by the famous Himeji castle for a bit of sightseeing.

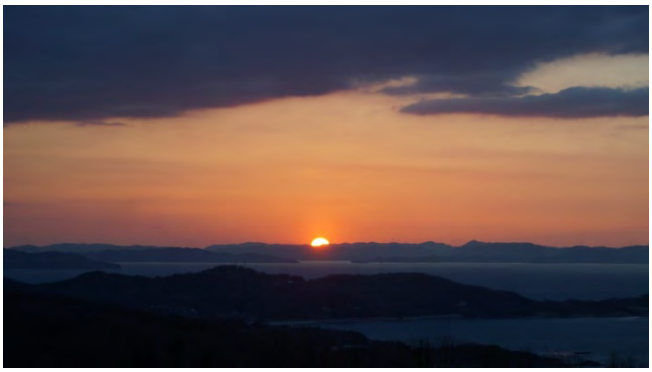
Himeji castle has been undergoing extensive renovations for a number of years, renovations are still taking place inside the castle until the end of March 2015, therefore we weren't able to enter the main castle, but the outer wall buildings were still accessible.

The castle is the largest and most famous in Japan. The walls of the castle were white and it stands in a grand elevated position. We were able to walk around part of the grounds, including some gardens and walled walkways with defensive loopholes. I also got to enter one of the outer buildings, a long corridor with many rooms set off from it leading up towards the main castle keep.



After a short visit we headed off to the port to catch a ferry to Shodoshima Island. Shodoshima's literal meaning is "small bean island", and is well known for being one of the first places in Japan to successfully grow olives. The island's mascot is a friendly green olive called Shima-chan, and numerous olive-themed products including cosmetics, chocolate and teas are available for purchase on the island.

We had some fabulous views during the ferry ride, passing numerous coastlines and small islands along the way. An hour and a half later, we were greeted by a hotel minibus and set off to our hotel, we shared large rooms between groups of three and four students, with French doors opening onto balconies looking out to the sea. We had a superb sunset on arrival to our rooms, we were all housed together in a row and everyone was out on the balconies getting some photographs of the spectacular sunset!



The next day we all assembled early for our trip to the monkey park, we set off in the mini bus and arrived at the park shortly after 9AM, with the bus due to return to collect us at 5PM.

To start off we all headed into the park and had an initial walk around, the park was surprisingly quite large with a loop walk way through an open area with some enrichment structures such as climbing frames and swings for the monkeys.

After a short walk into the park we reached a shed structure and were ushered inside by a park attendant, at first I wasn't sure what was happening but it turned out to be a feeding station so that visitors could feed the monkeys pieces of fruit. Almost immediately as soon as the fruit was presented, hordes of monkeys ran up the side of the cage and started reaching their hands through, begging for food. It was an intimidating experience being inside a small area with many monkeys gathering over the cage, and lots of aggressive behaviour erupting periodically when the food was handed out.

A short while later, we gathered for a special private monkey show which had been arranged for our group. I was told that monkey shows are a very old tradition in Japan, although rarer nowadays. A trainer and a monkey perform a circus-like show, with the monkey dressed up in children's clothing and performing tricks such as tight rope walking, back flips and walking on stilts… I found it very difficult to watch the performance, particularly when I realised the monkey wasn't being rewarded after the tasks, which meant it hadn't been trained by positive reinforcement. I worry about the perception of the monkeys to visitors of the park, as I don't think the monkey show show helps to promote wild animal conservation, or educate about prioritising and safeguarding wild monkey populations in Japan.

Following the show we took a break to have lunch and refresh before the afternoon. One of the main attractions of the park was meant to be a unique group cluster behaviour displayed by the monkeys in cold weather, although it seemed like a sunny spring day today, we headed further into the park after lunch to try and spot this behaviour among the free-roaming monkeys. Luckily, we did manage to catch the monkeys clustering. It was very interesting to watch, the cluster was initiated by a large male monkey, who vibrated his lips and made some vocalisations which resulted in a group of nearby monkeys creating a formation around the male. To begin with, the male literally picked some monkeys up and threw them out of the circle, before settling into the cluster. More and more monkeys appeared and joined in, creating a large cluster of over 30 monkeys.

Eventually, the cluster dispersed, but the monkeys were seen to form clusters several times throughout the day which was very interesting to watch. It seemed to be quite a unique behavior of this semi-provisioned population of Japanese macaques.

The park also had a view point which involved a rocky climb up a ridge, where there was a viewing pagoda at the top – this was spectacular! It was very windy up top but the views of the island were amazing and far-reaching.

While up on the view point, I saw two large coaches appear in the car park, and a large group of high school students began marching into the park, I could see a group of clustering monkeys down below all scatter and surround the children as they arrived. From above it looked like chaos – students and monkeys both running around and lots of noise. The children were wearing white gloves and it turns out they had peanuts in their pockets, and then started to feed the monkeys.

As quickly as they had appeared, the highs school students all marched down the hill and back onto their coaches and left the park. Leaving a group of us watching the scattered monkeys and waiting to see if a new cluster would form. We encountered a few monkeys who eagerly and sometimes aggressively tried to get into our coat pockets, climbing up our legs and clinging onto zips and folds… Which was a bit startling.

I really hope that as an outcome of this trip, PWS and Kyoto University might be able to become more involved with the Shodoshima Monkey Park and provide guidance on prioritising wildlife conservation and reducing human-primate conflict. I think this would create a more harmonious experience for both the monkeys and human visitors and could be a key opportunity to promote and educate the public about wildlife conservation. I also think Shodoshima Monkey Park could potentially be a very interesting study site for future students to study semi-provisioned Japanese macaque populations with unique and interesting behavioural traits such as cluster formation.

I'm grateful I got the chance to go on this trip, I've been lucky to see quite a few of the monkeys of Japan. Captive monkeys in PRI and Japan Monkey Centre in Inuyama, many wild monkeys on

Yakushima, and semi-wild populations in Jigokudani and also on Shodoshima. It's also opened my eyes to the different levels of conservation present in Japan.

Japan has a fascinating and diverse population of wild animals present and I truly hope that Universities and conservation initiatives can work together with animal parks to promote wildlife conservation and education, to help safeguard Japan's amazing wildlife for future generations.

12. Others

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

	2015. 03, 19
Affiliation/Position	Department of Ecology and Social Behavior /D1/L3
Name	Rafaela Sayuri Cicalise Takeshita

13. Country/location of visit

Shodoshima/ Kochi, Japan

14. Research project

Students tour to see "tolerant" monkeys/ Poster presentation at Zoo University

15. Date (departing from/returning to Japan)

2015.03. 12 – 2015. 03. 16 (05 days)

16. Main host researcher and affiliation

Staff of Osaru no Kuni (Shodoshima)/ Staff and keepers of Noichi Zoo (Kochi)

17. 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.

This trip was organized by the PRI students, aiming to observe "tolerant" monkeys at Shoudoshima, and to present a poster at "Zoo University" at Noichi Zoo (Kochi). In addition, the students worked together in order to organize the travel plans. Since I was one of the few students that joined the second part or the tour (Noichi zoo), I was in charge of doing research about restaurants and other places to eat in Kochi city.

1) Osaru no kuni (Shodoshima)

In the first day, we stopped by Himeji castle. Although the literature claims that it is Japan's best preserved feudal castle, the main tower was under construction, so we could only see the tower from outside. It was nevertheless very beautiful (Figure 1).

Figure 1. Himeji castle

In the same day we moved on to Himeji port where we took a ferry to Shodoshima. We stayed in a nice resort hotel not so far from "Osaru no kuni" monkey park. On the next day, we went to the monkey park.

My first surprise when I got there was to see that tourists could feed the monkeys (Figure 2). In Jigokudani,

where I have been conducting research, the staff always emphasized that feeding monkeys is not allowed, because if they learned that people have food, they would try to steal bags, pick pockets and even attack tourists in their search for treats. And that was exactly what I saw in that day. Monkeys were not scared of people, and some of them were not shy at all, which did not stop them to jump into student's coats and backpacks (Figure 3). One female approached me but I scared her off. I know the risks of being in contact with wild animals, so I prefer to keep a safe distance and respectful relationship with them.

Figure 2. Tourists (inside the cage) feeding monkeys with oranges.

Figure 3. Monkey attempt to steal tourists' bags

Another thing that upset me was to see skin problems in many individuals (Figure 4A). One cause for this kind of problems is fungus, but the immunological condition and stress levels can alter the susceptibility of the animal to fungus and skin infections. I also saw some monkeys in cages (Figure 4B), especially the ones trained for the "monkey street show". The staff told me that some monkeys are very aggressive and couldn't be in the same group as the others. As for the performance monkeys, I did not ask but I guess they are kept separately so the owners have an easy access for training and performance. Also, this would avoid injuries from other monkeys.

Figure 4. (A) Japanese monkey with fur loss. (B) Japanese monkeys kept in cages.

Unwillingly, I watched the monkey performance. The owner dressed the monkey like a human child and used a leash around her neck. Then, he made the monkey do many impressive things that monkeys **do not** do: walking bipedally on the floor and on a rope (Figure 5-A), jumping bipedally over obstacles using sticks (Figure 5-B), flips and so on. By the end of the performance, he made the monkey touch the hands on a few volunteers in the audience, and told them to take a picture with the monkey. Although the monkey was grimacing (Figure 5-C), doing continuous vocalizations and trying to get away of the stage, the owner did not release her. During one of the picture with the audience, the monkey showed aggressive behaviors, including slapping one student.

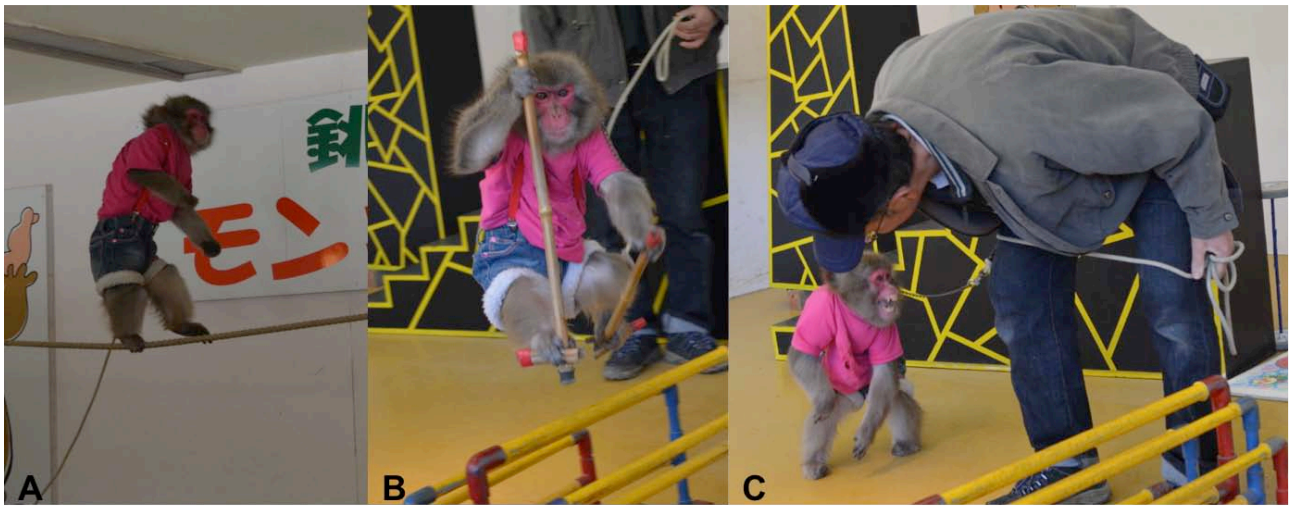


Figure 5. Monkey performance. (A) Monkey walking bipedally on a rope; (B) monkey jumping over obstacles using sticks, (C) monkey grimacing to the owner during the performance.

After the performance I was upset and wanted to go back to the hotel, but then I decided to watch the monkeys a little bit more because I noticed that they feed on the ground very close to each other, unlike many places such as Koshima and Jigokudani. Then I saw the alpha male approaching and doing the lip-smacking behavior (Figure 6). First I thought that he was doing that so the others would not get away, but then he moved away from the monkeys for about 2m and did that again. Suddenly, all the monkeys started to move towards him forming a cluster (Figure 7). It was amazing to see that for the first time! After 2 minutes, more monkeys approached rearranged the cluster. There were about 20 monkeys in the cluster, constituted by 3 adult males, 5 juveniles and around 12 females. They stick together for 9 minutes, when the alpha male started to kick some monkeys out. Passed more 5 minutes, the alpha male left and the group followed him.

Figure 6. Alpha-male showing lip-smacking behavior before cluster formation

Figure 7. Monkey cluster ("Saru dango")

I was told that Shodoshima monkeys form clusters to bear the cold temperature, but Shodoshima is not as cold as in Jigokudani, for example, and I have never seen such behavior anywhere. Zhang & Watanabe (2007) suggested that this behavior have adapted in the site due to the relaxed dominant relationship of this group, and they characterized them as less despotic and more tolerant. An interesting fact here is that I noticed that Arashiyama West monkeys from Texas also seem to have a social organization with less intense aggression and more tolerance in comparison to Jigokudani. However, I did not observed any cluster in Texas, which is not surprising, giving the extremely hot weather.

Overall, despite the conditions of the site and the treatment given to the monkeys, this trip was very productive. I could see the problems with the use of monkeys for tourism and the need to increase the local managers and public awareness about this matter. I could also clearly see how the behavior of Japanese macaques can vary with group, weather and area.

2) Zoo University (Kochi)

After seeing Shodoshima monkeys, the group split in two: those who would return to Inuyama, and those who would go to Kochi to present a poster in a event called "Zoo University", at Noichi Zoo. As I was in the latter group, the students and I went to Tonosho port to Takamatsu in order to get on the train to Kochi. Arriving in the city, we stayed in a nice traditional hotel facing the river and close to downtown. On the next day, we went to Noichi Zoo. My first surprise was to know that the attendees of the conference were mainly zookeepers and researchers. I did know that the talks would be in Japanese, but the only information I received about making a poster was "to make it understandable to the general public", so I did. I even wrote in basic Japanese to help, but I actually did not see many people from "general public" attending the conference. I received, although few, some visitors and questions about my study (Figure 8).

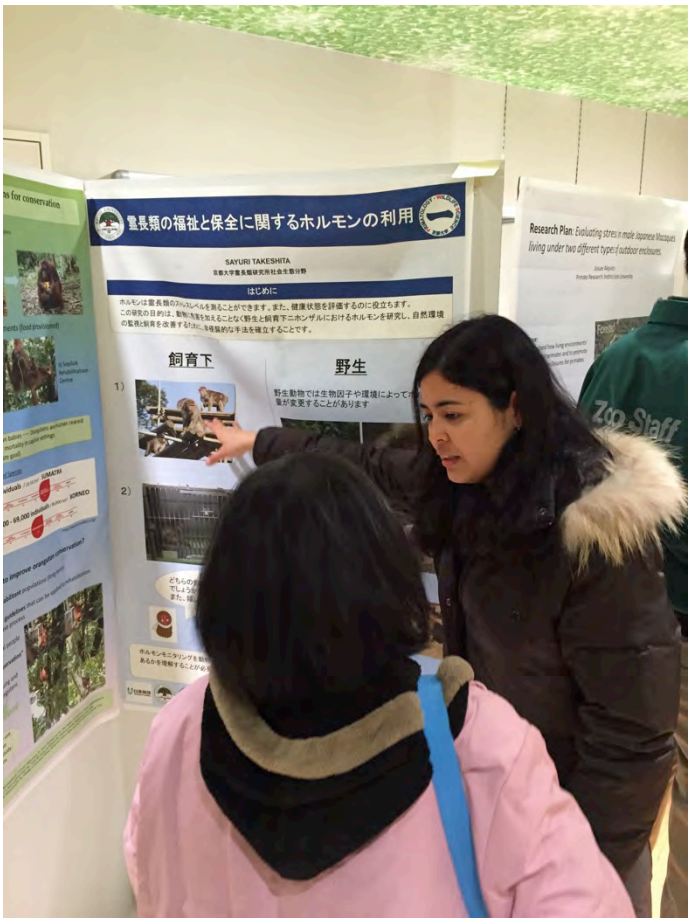


Figure 8. Explaining my poster at Zoo University, Noichi Zoo

The talks were hard to follow because of my Japanese level, not to mention the posters. On the other hand, I could freely visit animals in the zoo. I couldn't see them all due to the rain, but some enclosures looked good (e.g. giraffes, lemurs - Figure 9), while other enclosures seemed quite small (Figure 10). I observed hyenas and the red panda walking continuously in circles similar to a stereotype behavior related to stress. Moreover, while observing the mandrills, a young boy started to shake his umbrella, spraying water on one male, which immediately started to display aggressive behavior toward him. Perhaps a more protective fence would help to reduce the stress that the animals receive from the public.

Figure 9. Enclosure of (A) giraffes and (B) chimpanzees. We could not observe chimpanzees in this enclosure due to the rain.

Figure 10. Enclosure of (A) hyenas and (B) sea lions.

In general, although I could not get much benefits of the Zoo University, the visit to Noichi Zoo helped me to see the conditions of animals kept in zoos, and to think of better ways to improve it. For the next trip, I suggest that more information should be given to the students before asking for their confirmation in a conference, including program, contents and target audience. Regarding organizations and trip planning, information about the schedule and the progress of the planning should be shared equally among all the participants, in order to help in the development of other students' "roles" and to strengthen our teamwork skills.

18. Acknowledgements

I would like to thank PWS and Prof. Matsuzawa for funding this trip and all the other participants for working, planning and for the good time in Shoudoshima and Kochi.

7. References

Zhang, Peng, and Kunio Watanabe. "Extra-large cluster formation by Japanese macaques (*Macaca fuscata*) on Shodoshima Island, central Japan, and related factors." *American journal of primatology* 69.10 (2007): 1119-1130.

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

	2015. 03, 15
Affiliation/Position	Primate Research Institute / Prospective PhD student
Name	Morgane Allanic

19. Country/location of visit

Shodoshima Island, Kagawa Prefecture, Japan

20. Research project

To observe semi-wild Japanese macaques and to learn how to plan a trip

21. Date (departing from/returning to Japan)

2015. 03. 12 – 2015. 03. 14 (03 days)

22. Main host researcher and affiliation

Choshikei Monkey Park

23. 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.

This study tour organized by the Leading Graduate Program in Primatology and Wildlife Science was held in Shodoshima Island from March 12th to March 14th, 2015. The purpose of this study tour was to observe semi-wild Japanese macaques and to learn how to plan a field trip. In order to prepare this trip, we had two meetings and we exchanged many emails. All of us had to achieve different tasks and to help each other for preparing in the best way this trip. The first and last day were dedicated to transportation. We spent one full day from 9:00 am to 5:00 pm in Choshikei Monkey Park.

This population of Japanese macaques (*Macaca fuscata*) is known to form very large cluster of about 50-100 individuals to fight against the cold weather. During this visit, I could observe this particular and specific behavior two times:
(i) The first time was in the middle of afternoon. When I arrived around 40 individuals were already clustering. I observed the cluster during 20 minutes and then a group of approximately 40 students arrived. Unfortunately, the cluster finished because all individuals came to see the students.
(ii) The second cluster appeared in the late afternoon. I was really lucky because I saw the formation and the ending of the cluster. It was very interesting. The cluster started with, first, a very small group of 4 individuals. This 4-individual-group was then joined by the male which elicited the arrival of others individuals. The male ejected aggressively some females from around him, and started lip-smacking, then others individuals joined again. The cluster was about 50 individuals. It lasted during 40 minutes approximately. During this time all the individuals except the male exchanged many vocalizations with others individuals from outside the cluster in the Monkey Park. One person from the staff came to get some food, and some individuals went out of the cluster and came to the person. The male stayed few more minutes and then also joined the staff person and all the remaining individuals followed the male.

During the day, I observed another interesting behavior. A monkey was alternatively rubbing two rocks against each other, scrubbing the ground, and carrying the rocks. It was difficult to determine the function of these behaviors, however it was interesting.

I used this opportunity to observe for the first time semi-wild Japanese macaques and to see the very interesting particularity of this population with the formation of large cluster. These individuals could be good study subjects; they are easy to observe, and well habituated to humans. However the human disturbance is important. In effect the two clusters I observed ended because of humans, so it would be important to take that into consideration if you plan to study this population.

An individual is carrying two rocks.

Approximately 50 individuals in a cluster.

The male is ejecting one individual from the cluster.

Approximately 50 individuals in a cluster

24. Others

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

	2014. 03. 25
Affiliation/Position	Primate Research Institute, Kyoto University. Research Student.
Name	Gabriela Bezerra de Melo Daly

25. Country/location of visit

Shodoshima, Japan.

26. Research project

Shodoshima tour, group of semi provisioned Japanese Macaques.

27. Date (departing from/returning to Japan)

2014. 03. 12 – 2014. 03. 14 (3 days)

28. Main host researcher and affiliation

Organized by students

29. Progress and results of your research/activity

After much beforehand planning, our trip to Shodoshima started with the micro-bus leaving the Primate Research Institute, in Inuyama. Our first sightseeing stop was at the **Himeji castle**, located at Hyougou prefecture. The castle is one of the first UNESCO World Heritage sites in Japan and it is the largest and most visited castle in Japan. Already near the parking lot, its imposing presence could be seen. Once inside, only its external area could be surrounded, as its inner courtyard was being renovated. It was a remarkable example of refined traditional Japanese architecture, having survived Himeji bombing at the end of WWII. After Himeji, we stopped at Tonosho port to take a ferry to Shodoshima, where a shuttle brought us to the Hotel. That night we enjoyed the dinner buffet with all the members of the group.

Himeji Castle

The next day, the shuttle dropped us at the **Monkey Park.** There, we were readily instructed not to bring any plastic bags inside, because the monkeys would try to steal it in search for food. However, from a small cabin, humans could feed the monkeys. The park provided us with a nice view of the region from its hill summit. After spending some time taking photos and observing Japanese macaques, we went on to see the **monkey performance** led by one of the caretakers of the park. The performance by Aichan and her caregiver resulted in mixed feelings on the part of the PRI group. On the one hand, although very unnatural, her achievements were truly impressive (e.g. somersault among other acrobatics), on the other, students wondered whether the show was consonant with animal welfare. Points raised were, the probable harshness of the training, the separation of the performers (a male and a female) from the group, lack of reward during the presentation, signs that the monkey wanted to leave, among others.

However, from a historical perspective, monkey performances have played an important role: the earliest record of monkey performance is Japan dates from the XII century. "[T]he monkey performance began as a religious ritual conducted at stables during which a trained monkey danced to music in order to cure horses. It was a healing ritual with a monkey as shaman who harnessed the power of the Mountain Deity for healing purposes. The monkey was assigned this role since it was believed to be a messenger from the powerful Mountain Deity"[1] (Ohnuki-Tierney, 1987: 9). Afterwards, when horses lost their symbolic power

[1] Emiko Ohnuki Tierney. The monkey as mirror. Symbolic transformations in Japanese History and Ritual. 1987. Princeton University Press.

as agents in warfare, the performances passed on to the streets and many of the monkey's roles were used as a metaphor to either subversive acts (as staged "ordered disobedience" of the monkeys) or to pedagogy (as the monkey that repents his mistakes). In sum, according to Ohnuki-Tierney (1987) monkey performance varied through epochs, and it was a way for Japanese to stage features or transformations of their own society. That being said, I could not but wonder whether there is a way to reconcile tradition and animal welfare, i.e. a performance that would take into account animal welfare issues, and preserve its cultural meaning for Japanese society.

After the performance, we had more time to observe the group, which finally gathered in an ensemble we have so many times seen in photos. They did not seem to feel bothered by humans, choosing instead, to inspect our pockets for food. Because I recently started to work with primatology, and having worked only with chimpanzees in the laboratory, this was my first time to see Japanese monkeys in nature, and it was a truly remarkable experience. I am so used to looking chimpanzees in the eyes, that it was difficult for me not to look straight into them, since this is a sign of threat for macaques. During this trip I had the opportunity to observe the behavior and social dynamic of a species I was not acquainted with, and to establish many comparisons with the species I work with. This visit, therefore, truly enriched my knowledge of primates.

Flexibility and Balance

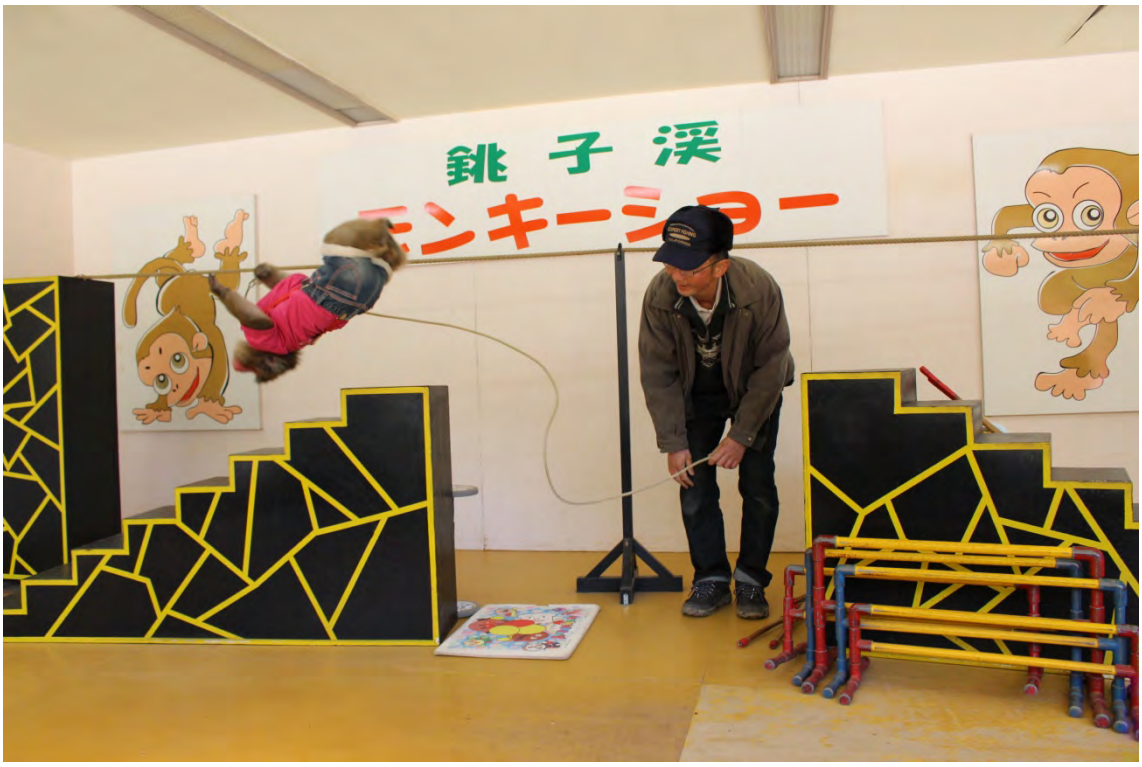
Monkey Park, Shodoshima

Humans go into a cabin to feed the monkeys

Bonding

Tolerant monkeys

View from the top of the hill



Monkey performance

A good motive to walk bipedal; checking our pockets

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

	2015. 3. 30.
Affiliation/Position	Primate Research Institute/D1
Name	Yosuke Kurihara

30. Country/location of visit

Tonosho-Cho, Shodo-Gun, Kagawa, Japan

31. Research project

Visit to the "Choshikei Osaru no Kuni"

32. Date (departing from/returning to Japan)

2015. 3. 12 – 2015. 3. 14

33. Main host researcher and affiliation

Choshikei Osaru no Kuni

34. 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.

I have studied ecology and social behavior of Japanese macaques in a provisioned group in Arashiyama and wild groups in Yakushima. Japanese macaques show wide variation in ecology and social behavior among habitats (from Shimokita Peninsula, the northern limit of the distribution, to Yakushima Island, the southern limit). Therefore, this practice in Shodoshima contributes to understanding the intraspecific variation of Japanese macaques.

I conducted behavioral observation in Chosikei Osaru no Kuni (monkey park) for a day. About 500 individuals from two groups have been provisioned in the park, and the monkeys were fully habituated to human observers.

Macaques in Shodoshima are characterized by its "tolerance". Although the frequency of aggressive interaction is higher than other populations, severe aggression accompanying bite rarely occur (Zhang & Watanabe, 2014). In addition, large-sized resting cluster is known as one of the behavioral repertoire showing their tolerance (Zhang & Watanabe, 2007).

I was able to observe large-sized resting cluster consisted of about 60 individuals, and very surprised to see it. In addition, distance among group members seemed to be shorter than other populations, even when macaques are feeding on wheat on the provisioning site and performing grooming. In accordance with the previous study, aggressive interaction occurred frequently, but unlike it, severe aggression was also observed relatively frequently.

I also observed food-snatching behavior ("Several monkeys, especially adult females, grabbed food from the cheek pouches of infants and juveniles, including their offspring.": Hadi et al., 2013). I was able to observe adult female grabbing wheat from the cheek pouches of her infant offspring, which had not been reported in the previous study.

Through this practice, I realized again the importance of research in multi-local populations, and developed an understanding of the intraspecific variation of Japanese macaques.

Large-sized resting cluster

Food-snatching behavior

35. Others

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

I am really grateful to the staff of Chosikei Osaru no Kuni for their warm support.

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

	2015. 3, 30
Affiliation/Position	Primate Research Institute/ M1
Name	Natsumi Aruga

36. Country/location of visit

Shodoshima, Kagawa Prefecture and Kouch Prefecture

37. Research project

PWS Study Tour, Zoo University

38. Date (departing from/returning to Japan)

2015. 3. 12 – 2015. 3. 16 (5 days)

39. Main host researcher and affiliation

Shodoshima Osaru no kuni, Noich Zoo

40. 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.

The scope of this report is on Shodoshima Island and Zoo University from 12th to 16th March, 2015. In this tour, members were 17 people and were gathered from many country, so we communicate in English.

Himeji City Zoo

We had a time until departure of ferry, so we visited the Himeji castle and Himeji city zoo. This zoo was not so huge, but there were many parents and child. Elephant "Himeko" had popularity among them, so there were many people in front of her. My prefer enclosure was *Meles meles anakuma* because this enclosure showed the situation of digging from outside.

Figure 1. Himeji City Zoo

[Itinerary]
12/3/2015
Departure from Inuyama
Himeji Castle, Himeji city zoo
Departure from Himeji
Arrive at Shodoshima Island
13/3/2015
Osaru no kuni
14/3/2015
Departure from Shodoshima Island
Arrive at Kochi
15/3/2015
Zoo University at Noichi zoo
16/3/2015
Wan Park Kouchi Animal Land
Departure from Kochi
Arrive at Inuyama

Figure 2. Himeko

Figure 3. Enclosure of *Meles meles anakuma*

Osatu no kuni

We visited Osaru no kuni where continue to performance of Japanese macaque. There were 2 individuals "Ai" and "Mimi" who were performer. However I have been to Takasakiyama and Jikokudani, I got difference impression from facility and also Japanese macaque. They habituated 2 group of Japanese macaque. Tourist could feed them from two small enclosure. One fed oranges and breads, and we should enter the special enclosure for human. I saw like a system first time, so I was so surprised. The other fed soy beans. Japanese macaque was famous as gathering highly than other places. In this time, I saw many gathering of Japanese macaques. This is a little be strange because they gather if there were no food. We observed closely many behavior all day in Osaru no kuni; gathering, play with stones and feeding.

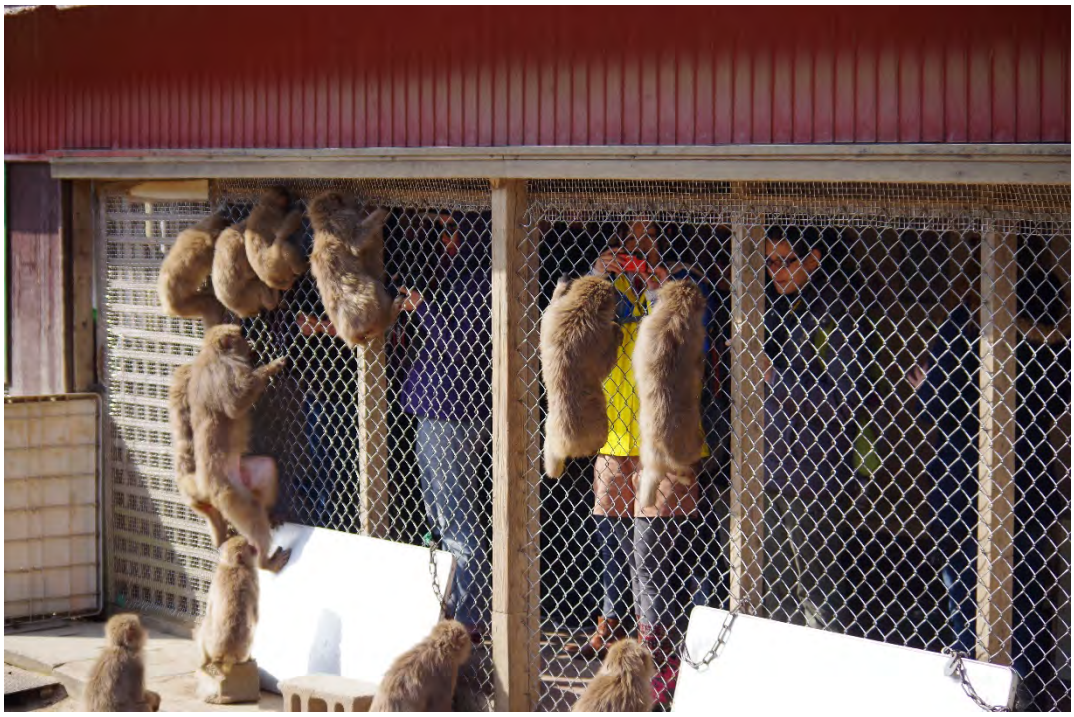


Figure 4. Enclosure for tourist

Figure 5. Japanese macaques were waiting soy beans

Figure 6. Japanese macaque play stone which were same size.

Zoo University

We visited Noich zoo for attending the zoo university after Shodoshima Island. This is second

time to attend this symposium for me. I presented about my education program in Uganda. This time was good opportunity as telling the condition of Uganda and getting some ideas from zoo keepers. The theme of this symposium was the aging animal and the disease animal. This theme was difficult to treat but it is very important for zoo, zoo keepers, researchers and visitors. I was impressed this symposium and good opportunity for having a rethink.

Wan Park Kouchi Animal Land

We had a small time before departure from Kouchi, so we visited the Wan park kouchi animal land. Zoo was small and zoo keepers were about 10 people but there were many ideas each enclosures. Information signs had many information but they were very simple and easy to understand.

Figure 7. Cute Gate

Figure 8. Good sign of the flamingos

Figure 9. Sign of amphibians and reptilians

41. Others

I would like to express my appreciation to the PWS program and Prof. Tetsuro Matsuzawa for the pportunity to study at PWS Study Tour.

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

	2015. March, 27
Affiliation/Position	Center of Human Evolution Modeling Research, Doctoral 2 (JSPS Research Fellow)
Name	Saori Suzuki

42. Country/location of visit

Tonosho-cho,Shodo-gun, Kagawa, Japan

43. Research project

Practical training of field work in Shodo Island; Observation of Monkey Cluster (Saru-dango).

44. Date (departing from/returning to Japan)

2015. March. 12 – 2015. March. 14 (3days)

45. Main host researcher and affiliation

Choshikei Natural Zoo Osaru no Kuni

46. 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.

In this tour, we went to Osaru no Kuni in Shodo Island to observe clustering Japanese Macaques called 'Saru dango'. There are about 500 Japanese Macaques in Osaru no Kuni, they organize 2 groups, group A has 300 individuals and group B has 200 individuals. Alpha male named Danzyuro in group A looks old, and Group B is stronger than A. Group B occupied the feeding area and group A hid in the woods right before feeding time. Monkeys in group B looked offensive more than group A.

I was surprised so much when the monkeys touched me and tried to steal something in a pockets. I felt that they are used to human so much. Japanese Macaques living in small islands around the main island are said that character is temperate and non-offensive. That's why they gather and make Saru dango with about 50 individuals. In the main island, Japanese Macaques can cluster but it is rare case even 6-7 individuals clustering. So I had great interests in Saru dango. It was not so cold and sunny day when we observed them, we couldn't find any Saru dango until evening. Although we saw 2-3 monkeys clustered, but other monkeys stayed alone or groomed each other. In the early evening, monkeys started to gather and clustered, finally Saru dango was built by about 50 individuals. The monkeys chattered and made a characteristic noise in Saru dango. Some students worked in a field told me it meant they were hungry or wanted to go back to their beddings. I don't know the true meaning but it was so curious sound. I found a high-rank monkey could walk on the other monkeys and thrust himself into it, but non high-rank monkeys snuggled against the surface around the cluster. Japanese Macaques in Shodo Island is temperate but they have strict hierarchy. In a Saru dango, a specific monkey tried to add the cluster but some monkeys didn't permit and started a fight. Such behavior was observed in only group B.

About monkey show, normally 2 shows are held in a day. But a special show was held only for us by the courtesy of the staffs. We observed a trained monkey cooperated with a trainer, did push-ups, performed a balancing act and walked on stilts. In that park, 2 monkeys, Mimi and Ai, are ready for the show and one monkey is training. The trainer said that usually other professional trainers use male monkeys but they train only female monkeys because it's hard to manage and rank them higher than the monkeys. Trained or captured monkeys from a group once for the monkey show cannot go back to the group neither live safely with other monkeys again, so they have to live in a cage for their remaining life. In the park, there are several monkeys in a cage although only 3 monkeys are for the show. Others are caught to perform show but failed in training. In Japan, monkey show is not quite unusual, it might be Japanese culture. We can watch the monkey show in some monkey parks around Japan. We, Japanese, get used to such kind of animal shows, but it might be skeptical about animal welfare. The monkeys who trained even only onetime cannot go back to their group and have to live in a cage. In this point of view, they are restricted their life and

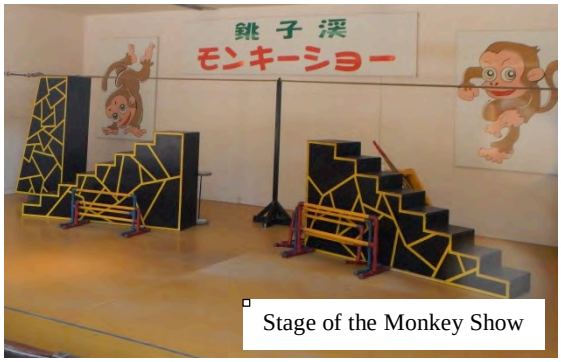
enrichment. But I felt affection from the trainers to the monkeys. One trainer said that she started training the female monkey when the monkey was a baby whose mother didn't raise her. So she fostered her like her daughter with affection. Also I felt affection from an another trainer. The trained monkeys cannot live like other monkeys. But they have been took care of, and have their own welfare although that welfare might be different from other monkeys. But we should keep discussing and considering about animal welfare, how we should live in harmony with animals.

Through this field work, I learned the character of Japanese Macaques in Shodo Island and I got a chance to consider about animal welfare and the different way of perceiving the monkey show between individuals. I felt importance of discussion such a complicated issue between students. I thank all of the staffs in Osaru no Kuni and this tour members for their cooperation to achieve this tour successfully.


Saru dango


A mischievous monkey!

Group photo



Stage of the Monkey Show

47. Others

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

	2015.3.30
Affiliation/Position	Cognition and Learning section, PRI / D2 student
Name	Takeshi Atsumi

48. Country/location of visit

Japan, Shodo-shima (小豆島)

49. Research project

Study tour of PWS

50. Date (departing from/returning to Japan)

2015.3.12 – 2015.3.14 (3 days)

51. Main host researcher and affiliation

52. 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.

During this study tour, we inspected one of the study sites of Japanese macaques, Shodo-shima Monkey Park in Choshikei, Shozu-gun, Kagawa prefecture. Here, I report the outline of the schedules during this visit, and summarize this tour, by focusing on the appropriateness of this site for a fieldwork of the beginner researchers.

There are few ways for transportation because the site locates in an isolated island. On the first date (3/12), we moved to Shodo-shima by using bus and ferry, and arrived at hotel nearby the park. Shodo-shima is not so small island, and there are many hotels, food restaurants, and some kinds of supermarkets around the ports. However food resources could not be obtained around the monkey park. Some web sources showed wrong information about this, hence, visitors must contact the stuffs by phone beforehand.

On the second day (3/13), we went to Choshikei Monkey Park by using the reserved bus of hotel and stay there from the morning through the evening. There are two groups of Japanese macaques in the park, and each consists with 300 and 200 members. Visitors can feed monkeys with soybeans and oranges under the responsible direction of the stuffs (figure 1). Therefore, monkeys do not ignore human visitors unlike Jigokudani Monkey Park (Shimotakai-gun, Nagano pref.). They can quickly learned the feeders, and reach their hands to visitors baggage and even coat pockets. Such interaction between monkeys and humans cannot be seen in wild. In addition, visitors can see monkey performances (猿回し). Some monkeys trained to perform tricks, and they show this twice a day. In this day, we interviewed the monkey trainer especially because some members were strongly interested in this cultural performance.

One of the characteristic behaviors of the monkeys in this park is big clusters, in which monkeys keep their contacts each other. This behaviors can be seen in a cold day and not so many times, however, we could see the clusters at dusk.

On the final day (3/14), the members, including me went back to PRI directly.

In summary, researchers can see Japanese macaques, which are originated from wild and frequently interact with human visitors in Choshikei Monkey Park. Students can easily watch the monkeys in a wild, but it is difficult to plan a visit there for foreign students because there are few descriptions in other languages about this island.

Fig. 1 Visitors fed monkeys with oranges.

53. Others

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

	2015.03.20
Affiliation/Position	Primate Research Institute/D1
Name	Liesbeth FRIAS

54. Country/location of visit

Japan/ Shōdoshima

55. Research project

PWS study tour: observation of Japanese macaques in Choshikei Monkey Park

56. Date (departing from/returning to Japan)

2015.03.12 – 2015.03.14 (3 days)

57. Main host researcher and affiliation

Choshikei Monkey Park

58. 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.

The two main purposes of this PWS study tour were (1) for students to organize and plan a trip to Shōdoshima, including transportation, accommodation, meals and sightseeing, and (2) to observe a group of Japanese macaques known for their clustering behavior.

Schedule:
2015.03.12 Visit to Himeji Castle, arrive in Shōdoshima
2015.03.13 Visit to Choshikei Monkey Park
2015.03.14 Leave for Inuyama

Before the trip we had a couple of meetings to distribute the activities among students, from scheduling the day to look for restaurants and sightseeing around the area. The first part of the study tour was a 5-hour bus trip from Inuyama to Himeji, where we visited the famous Himeji castle (Fig. 1), one of the first UNESCO World Heritage Sites in Japan. The castle is also known as White Heron Castle, because of the white walls that resemble the white wings of a heron spreading its wings to take flight. It is the largest, most visted castle in Japan, and it has survived to many catastrophes throughout its history, like the Himeji bombing at the end of WWII and the 1995 Great Hanshin earthquake. From October 2009 to the beginning of 2015, Himeji Castle underwent restoration; the main keep won't be open to the public until the end of this month.

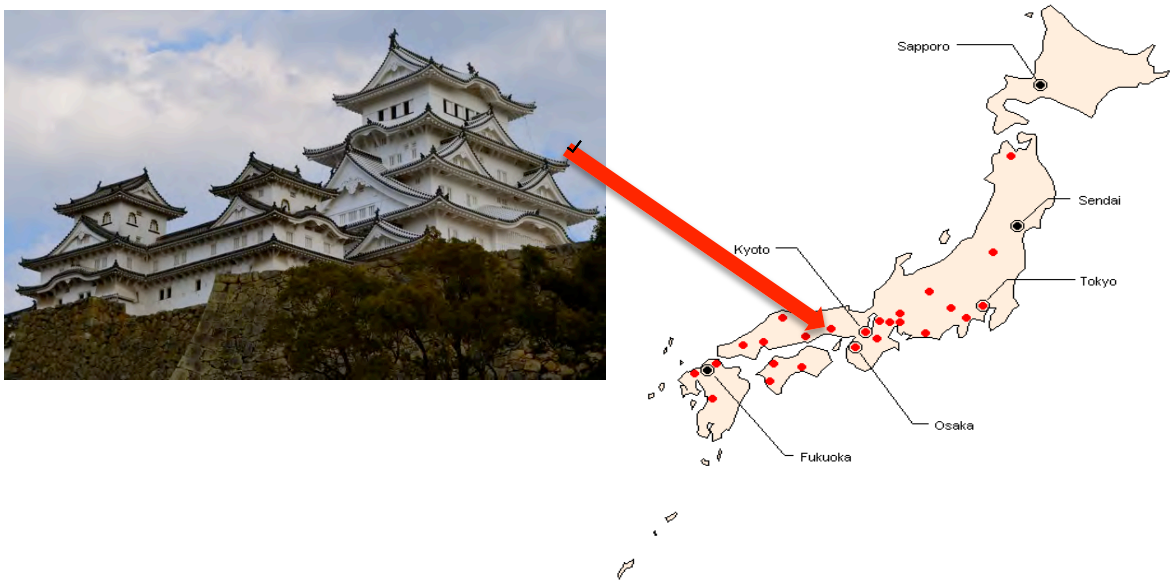


Fig.1. Location of main castles in Japan (red dots). Red arrow points to Himeji castle.
Image credit: http://pages.ca.inter.net. Photo credit: Liesbeth Frias.

After a couple of hours visiting the castle, we took the ferry to Shōdoshima (Fig. 2), an island located in the Inland Sea of Japan. The name of the island literally means "island of small beans", which is related to the fact that this is the first place in Japan to grow olives, so it was no surprise to find all kinds of olive-based products in the island.

Fig. 2. Ferry to Shōdoshima (left) and some members of the study tour having a fun trip (right).
Photo credit: Liesbeth Frias.

On the second day we headed to Choshikei Monkey Park, located between the mountains in the middle of the island, to watch the Japanese macaques (*Macaca fuscata*). These macaques are free ranging (Fig. 3), but habituated to the park staff and visitors. As in other monkey parks in Japan, visitors can feed the monkeys from a feeding room, where the window is instantaneously covered by monkeys wanting their share of oranges (Fig. 4).

Fig. 3. Macaques roaming free in the park. Photo credit: Liesbeth Frias.

Fig. 4. Macaques been fed from the feeding cage. Photo credit: Liesbeth Frias.

Japanese macaques in Shōdoshima are known to aggregate in large clusters, behavior that has not been observed in other populations of the species. Besides the macaques, there were also deer roaming freely and some peacocks in the enclosures. At the end of the park, there was a path that led to a shrine and a small rocky hill that offered an astonishing view of the island and the sea (Fig. 5).

Fig. 5. View from the top of the hill. Choshikei monkey park (left) and Shōdoshima (right).
Photo credit: Liesbeth Frias and Gabriela Daly, respectively.

We spent the whole day in the park waiting for the macaques to cluster. As the sun started to set and the temperature to drop, a large male macaque made some vocalizations that resulted in macaques coming to surround him. The group grew bigger and bigger and at some point we counted over 30 macaques clustering together (Fig. 6). The male even chose which individuals he wanted to have close to him! While in the cluster, individuals located in the center stayed quiet enjoying the warmth and the ones located in the periphery kept grooming. The cluster lasted for around 15 minutes until the male walked out of it and the other macaques rapidly dispersed.

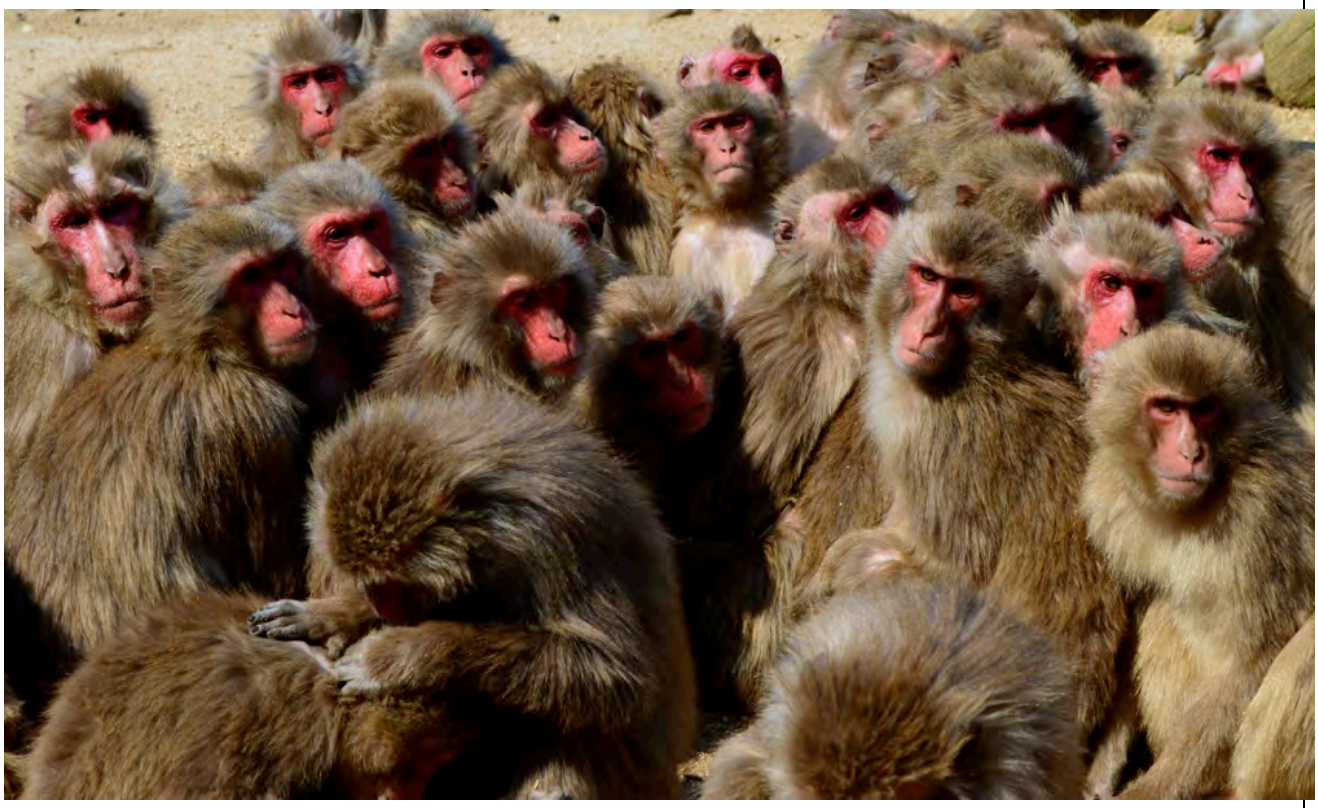


Fig. 6. Saru-dango. Photo credit: Liesbeth Frias.

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

This study tour to Shōdoshima offered us a great opportunity to observe a local population of Japanese macaques and to know yet another aspect of the tradition of primatology in Japan. It also gave us the chance to partake of the difficulties of organizing and planning a group activity in the field, which we are likely to encounter once again in our own research activities.

Acknowledgments

I would like to express my gratitude to PWS and Prof. Matsuzawa for supporting this study tour. Also I would like to thank the staff of Choshikei Monkey Park for their kind welcoming. Special thanks to our colleagues Takashi Hayakawa, main coordinator of the trip, and Hikaru Wakamori, leader of the group that returned to Inuyama on March 14th.

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

	2015. 3. 31
Affiliation/Position	Primate Research Institute/ D1
Name	Hikaru Wakamori

59. Country/location of visit

Shodoshima island, Kagawa Prefecture, Japan

60. Research project

Observe wild Japanese macaques which make clusters "Saru-dango".

61. Date (departing from/returning to Japan)

2015. 3. 12 – 2015. 3. 14 (3days)

62. Main host researcher and affiliation

Mr. Nishio, Choshi-kei Osaru-no-kuni, the monkey park at Choshi-kei

63. 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.

This was my third place to observe wild Japanese macaques. The other two places were Koshima island and Yakushima island. I also have experience of observing wild rhesus macaque, northern pig-tailed macaque, long tail macaque and Assamese macaque, so my interest during this trip was to see the difference of Shodoshima Japanese macaques from others.

Day 1 and day 3 were only to travel between Inuyama and Shodoshima island, with a little visit to Himeji castle and Himeji city zoo. Day 2 was the only day that we could observe the monkeys. Choshi-kei osaru-no-kuni, the monkey park is locates in north west part of the island with mountainous geography, composed with several captive Japanese macaques and a ring-tailed lemur, quite a big number of peacocks which were moved from peacock zoo. At the park, keepers feed the wild Japanese macaques twice a day, so the wild groups appear and it is the tourist interest. Tourists can feed the wild macaques by buying peanuts and oranges there. Also the park held a monkey show or Saru-mawashi, which is one of Japan's traditional entertainments.

At the monkey show. Ai-chan the monkey and Mr. Nishio the conductor.

Our group had time to see the monkey show held by Mr. Nishio and Ai-chan the Japanese macaque. We also had some question time. It was my first time to watch the monkey show in a live so it was impressing but at the same time, I felt cruel to the monkey who practice for the show, because the monkey should have been trained very strictly to be able to do so many tricks. The fact that after the retirement of the monkeys as a show monkey, they are not able to go back to the wild group made me feel sad because living in the group is the natural habitat of Japanese macaques.

The clusters or "Saru-dango" were seen in the afternoon, when the sun started to move to west and the wind started to be strong. First the cluster starts from just 2 or 3 individuals gathering, but gradually additional member joins and become bigger. It grows bigger and last for long time especially when dominant male is in the cluster. New comer usually sits from the outside, so for the individual one side is warm by sticking to other individuals but the outside part is cold until another new comer sit next to them. However the dominant male can invade to the middle by moving the other individuals by his power. The biggest cluster that I could observe was with 60 individual and last for more than 40 minutes.

Cluster of Japanese macaques. Some started to take nap and it looked so comfortable.

Cluster here and there at evening.

Though this observation, I can't stop thinking how the Shodoshima island Japanese macaques are tolerant than

other macaques that I have observed before. For instance, I cannot imagine that rhesus macaques make this big cluster, they probably start fighting after gathering more than 4 individuals. Even in Japanese macaques, Shodoshima is the only place that they make this huge cluster. With this number of individuals, it is hard to expect that they are all in kin ship. The increasing cluster size might have relation with the windy weather, and there are no big trees for windbreak inside the monkey park.

64. Others

I deeply thank to Dr. Hayakawa, the tour leader, for planning and working for this tour. I would like to mention that every member had their own role and everyone's work led the tour success. I also thank to PWS program to for making us this opportunity.

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

Affiliation/Position	Primate Research Institute/M1
Name	Josue Samuel Alejandro Pastrana

65. Country/location of visit

Shodoshima and Kochi, Japan

66. Research project To view peculiar behaviors of primates in Shodoshima and Zoo symposium.

67. Date (departing from/returning to Japan)

2015 March 12- 2015 March 16

Shodoshima Study Tour 小豆島研修の案内

68. Main host researcher and affiliation

Dr. Hayakawa, Special Appointment Professor of PWS

69. 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.

This trip to Shodoshima and Kochi, was a very special one for me. It was my very first trip as a graduate student with my new colleagues from the Primate Research Institute and I was going to a part of Japan I had never seen before. Because I am focusing my studies in animal welfare, looking at the behaviors of Japanese Macaques in captivity, I thought it would be a great experience to see Japanese Macaques in their natural habitats, which are famous for their peculiar behavior in huddling in big clusters, as well as to participate in a symposium that focuses on welfare of captive animals.

After a long journey by various modes of transportations and after viewing many beautiful sights of Japan, we made it to the island of Shodoshima. I was really impressed by the size its tall mountains, the surrounding view of the beautiful islands and inlets nestled in the Harima-nada Sea. It was all very breathtaking. After a night of relaxation at our hotel, we left early the next morning to the monkey park. We were greeted by very nice local people who gave us all the information and rules we needed to follow at the park. At first, we were asked if we were interested to feed the animals from inside a cage. It was very interesting to find myself inside a cage, feeding primates from the inside, I think that experience gave me a new perspective on what it means to be wild vs captive. After a few hours feeding the animals, I noticed that they were only huddling in big clusters when they were being provisioned. At first, I thought that the special behavior, "sarudango", was only a product of provisioning. We talked with the local people who took care of the animals and they explained to us who the groups were, the amount of animals in each one, and where they roam in the area. I found it peculiar that the animals seemed smaller than the animals I work with in Aichi, and also they seemed to be really habituated to human presence, more so than the captive animals I see on a regular basis. I still did not see the cluster behavior until around 13:30, when the weather started getting colder and windier, then I noticed up to 30 individuals huddling together in a great big ball, without being provisioned. It was amazing to see many animals in the big cluster, including 3-4 adult males, without fighting and showing affiliative behaviors (huddle, lip-smacking, etc.) without any need of provisioned food. At that moment, I knew I saw a very peculiar behavior that I had never seen before. Indeed, I think animals of different groups have their own customs just like humans do, and this was definitely proof of that.

After spending some time in Shodoshima, and parting ways with some of our colleagues, some of us headed to Kochi, Shikoku to participate in a conference for captive animals, mainly and zoos, with the main topic of welfare. It was great to get a lot of feedback from my research plan, especially from people who dedicate their work to improve the lives of wild animals in captivity. Though there were some times I could not follow, as my Japanese is not that great yet, I was happy to try my best and discuss animal welfare with people from another culture and another point of view. I left very grateful and honored to have had the experience.

70. Others

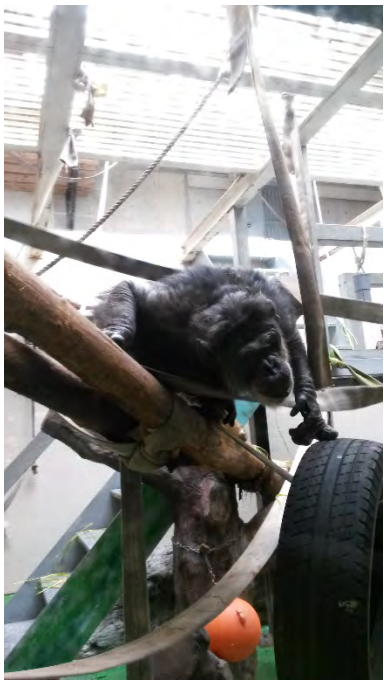
Research Activity Report
Supported by "Leading Graduate Program in Primatology and Wildlife Science"

"Sarudango", Shodoshima Japan

From inside the cage, a different perspective.

New friends and new sights!

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



VIP tour of Zoo after symposium!

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

	2014. 04, 29
Affiliation/Position	Primate Research Institute/D2
Name	Renata Mendonça

71. Country/location of visit

Japan/Shodoshima, Kochi

72. Research project

Visiting Shodoshima to see Japanese Macaques and participation in Zoo University Conference at Noichi Zoo.

73. Date (departing from/returning to Japan)

2014. 03.12 – 2014. 03.16 (5days)

74. Main host researcher and affiliation

Choshikei Monkey Park staffs and Noichi Zoo staffs

75. 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.

I have been a Primate Research Institute doctoral student since 2013, but since I have spent most of my time conducting research in Borneo, I haven't had the chance to see Japanese Macaques in their natural environment. This trip was a great opportunity for me to see Japanese macaques in a wild-like situation. Besides visiting the Choshikei Monkey Park in Shodoshima, I also took this opportunity to present a poster at the Zoo University conference focusing on animal welfare in Noichi Zoo, Kochi.

On the way to Shodoshima, we stopped by Himeji and visited the beautiful Himeji castle (Fig.1). This castle, easily recognized due to their white exterior, was classified as UNESCO World Heritage Site and is one of the three most visited castles in Japan, together with Matsumoto and Kumamoto.

After an almost 8 hours trip, through beautiful landscapes, including a sea crossing (Fig. 2) we arrived at Shodoshima, The hotel where we stayed, Olivean Shodoshima, had a wonderful view over the sea (Fig. 3).

Fig. 1 - Himeji Castle, Hyogo prefecture.

Fig. 2 - View from the boat on our way to Shodosima Island.

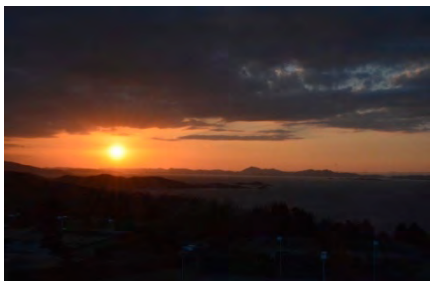


Fig. 3 - View from the Olivean Shodoshima resort.

On the following morning, we left to the Choshikei Monkey Park to see the Japanese macaques. The Shodoshima macaques are best known for their characteristic behavior of forming clusters and high tolerance during resting and feeding times. The cluster behavior was first reported by Yamada (1966) and is known to be a strategy to cope with the low temperatures of the winter season.

Once we arrived to the Choshikei Monkey Park, we were guided to the "feeding enclosure" where the visitants were able to feed the macaques. In exchange for 100 yens the visitants received oranges for the feeding (Fig. 4). I am not an apologist of this kind of tourist-monkey interactions, but I think they made the best of a "not so good" situation 1) by keeping visitants in a cage while feeding the macaques and 2) providing the food to the visitants, instead of letting them bring their own food. I could see how older individuals and, most likely, the dominants retrieved the food more often and stole from the younger/subordinate ones, after displaying aggressive behaviors towards them.
The macaques in park are extremely habituated to people, they showed no fear when we walked towards them and they even dared to check our pockets searching for food (Fig.5). Luckily (or wisely), we left our food outside in the restaurant otherwise we might not have had lunch.

Fig. 4 - Visitants feeding the macaques from inside of the enclosure. View from outside (left) and view from the inside (right).

Fig. 5 - Pickpocket macaque.

At 10:30, we went to see the monkey show. I was a bit reticent about it, and even pondered not to watch it, but in order to give my opinion about the issue, I had to see it with my own eyes. The trainer brought the macaque from the cage by a leash to the show area. The macaque was an 8 year-old-female dressed like a human. The individual was kept with the leash throughout the whole show and asked to do things that are not natural for them, like some gymnastic exercises, such as flips, somersaults, jumping and walking using stilts, among others. By the end of the show we could see how stressed the female was, as she was emitting distressed vocalizations and showing aggressive behaviors towards students. The keeper mentioned that the macaque receives reward after the performance back in her enclosure and she will retire when reaching the age of 20 years-old. In my opinion, the show was really unnecessary, as it represent a very unnatural/stressful situation. It should be enough for the tourists to see and to appreciate their natural behaviors.

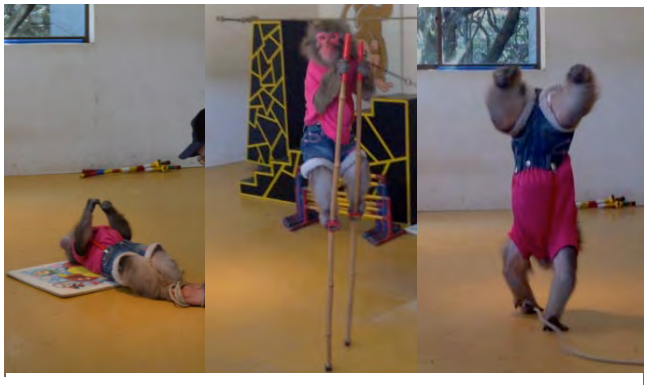


Fig. 6 - Some performances at the monkey show.

Besides macaques, the park also houses a group of lemurs, rabbits and peacocks, and some macaques are kept in a cage. When asked why, the keeper said that they show aggressive behaviors towards the other members of the group that is why they should be kept separated from the free-ranging macaques.
Some macaques also showed some skin troubles and they look skinnier and smaller, in comparison with macaques I've seen, for example, in PRI.
After the monkey show I was wandering around, following the macaques and taking some pictures of their behaviors (Fig.7 to 10).

Fig. 9 - View from the monkey park.

Fig. 8 - Grooming behavior.

Fig. 9 - Mother carrying her baby, ventrally.

Fig. 10 - View from the park.

Finally, in the afternoon we were able to see the formation of a cluster. After feeding time, the macaques were resting and engaging in some affiliative behaviors, such as grooming and playing in a very close proximity (Fig. 11). The formation of the cluster (Fig. 12) was initiated by the alpha-male. After making "lip smacking" for a couple of times, the rest of the group nearby approached him started to form the cluster. The alpha-male occupied a central position in a cluster surrounded by other individuals of different classes and both sexes. He was also responsible for keeping the balance, by kicking out some individuals, and for disintegration of the group 15 minutes after its formation. After he left the cluster some individuals followed him and cluster was finally disrupted.
There are reports of clusters that can reach around 100 individuals in some macaque groups in the Winter (Zhang and Watanabe, 2007). The one that I observed consisted of around 30 individuals. Perhaps if we had gone there in the coldest months, January of February, we would have had the chance to see larger clusters.

Fig. 11 - Before the formation of the cluster the monkeys were already resting in a close proximity

Fig. 12 - Macaque cluster, with the alpha-male in the center of the group.

On the morning of 14th of March, while some students made their way back to Inuyama, other students, including me,

went to Kochi to participate in a conference at Noichi Zoo, called "Zoo University", on the next day. For that I prepared a poster about how orangutan research can contribute for rehabilitation and conservation, mainly to give awareness to the public about their endangered status (Fig. 13). The poster session was scheduled after lunch between the morning and afternoon oral presentation sessions (Fig. 14). All the talks and posters were in Japanese with slides in Japanese, which made it very difficult for me to understand. That is understandable, once it was held in Japan, however if they accepted international students, it would have been better having a more favorable format for foreigner students/ researchers.

Fig. 13 - Poster presentation.

Fig. 14 - Oral presentation in Zoo University conference.

The zoo was located in a very nice area and it was very pleasant in general, although some enclosures were too small for the number of animals housed. Some animals showed some stereotypical behaviors, very evident in seals and hyenas. The primates' enclosures were the best, in general, specially the lemurs' (Fig. 15) and the new world monkeys' ones. I also saw the chimpanzees, gibbons (Fig.16), mandrills, otters, giraffes, hippos, among others.

Fig. 15 - Lemurs at the Noichi Zoo.

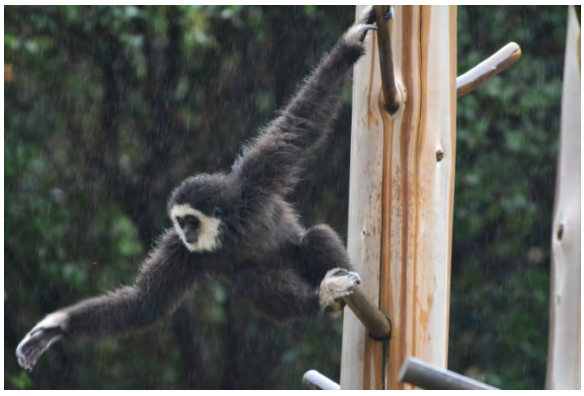


Fig. 16 - Gibbon at the Noichi Zoo

Overall, it was a very interesting experience in Shodoshima. I haven't yet seen Japanese macaques in other wild environments (I read and heard about them and I have seen other wild macaques), but I was very impressed to see the cluster behavior and how tolerant they were towards the other members of the group. And, of course, I can't forget to mention that the landscape surrounding the park is simply amazing.

76. Others

I would like to thank to PWS Graduate Leading Program and to Professor Tetsuro Matsuzawa for giving the opportunity to visit Shodoshima and for supporting the trip, and to the organizers of the Shodoshima-Kochi trip.

Yamada M. 1966. Five Natural troops of Japanese macaques in Shodoshima Island (I): distribution and social organization. *Primates*, 7:315- 362.

Zhang P, Watanabe K. 2007. Extra-large cluster formation by Japanese Macaques (*Macaca fuscata*) on Shodoshima Isaland, Central Japan and related factors. *Am J Prim*, 69:1119-1130.

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

	2015. March, 25
Affiliation/Position	Primate Research Institute, Kyoto University / D2
Name	Yoko Sakuraba

77. Country/location of visit

Japan / Shodoshima and Kochi

78. Research project

Observation of semi-wild Japanese macaques in Shodoshima, and presentation in Zoo University symposium in Kochi

79. Date (departing from/returning to Japan)

2015. March 12 – 2015. March 16 (5 days)

80. Main host researcher and affiliation

81. 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.

1) Observation of Japanese macaques in Shodoshima

It is said that Japanese macaques have own culture in semi-wild group. I have been to Koshima (in Miyazaki), Arashiyama (in Kyoto) and Jigokudani (in Nagano), where we can observe semi-wild Japanese macaques. They show unique behaviors in each; monkeys in Koshima wash sweet potatoes and wheat, monkeys in Arashiyama eat soil, and monkeys in Jigokudani take a hot spring during winter. Monkeys in Shodoshima is famous of making large rest clusters (さるだんご) during winter. In this time, we could observe it and found that the structure is unique.

There are two troops in Shodoshima; one troop, named A group, has 300 individuals including Danjuro as alpha male, the other troop, named B group, has 200 individuals including Tora as alpha male. We could observe some large rest clusters consisted of around 50 individuals in each troops. Ogawa (2010) reported that Japanese macaques make rest clusters consisted of a couple of females, mostly mother and her daughter in other field sites. However, the large rest cluster in Shodoshima consisted of a high rank male (the center) and many females. Therefore, we could observed some large cluster such as "beta male's cluster", "alpha male's cluster" and so on. Of course, monkeys in the central part of the rest cluster seemed to be relax and warm; it is same expression of monkeys in hot spring in Jigokudani (figure 1 and 2). Moreover, I felt that the individual space of each monkeys is small at any time than other field sites. It sound that they are very friendly. However, the male forced into more central part of the huddling, pushed other females, and sometime it led to fight.

Why they make large rest clusters in Shodoshima? I thought 'windy' is one of factor on it. Jigokudani is very cold and snowy, on the other hand, Shodoshima is not so cold in winter and few snow: it means that other factors make a large cluster as well as cold. The monkey center placed on surface of a mount, there are not high trees, and I felt cold cause of strong wind when we observed the monkeys. From this, I thought that monkeys make large clusters to avoid strong wind. Actually, one large cluster was under the eaves. It is suggested that the culture of making large rest clusters in Shodoshima occurred to avoid wind and cold, and by their character which are small individual space. Monkeys in Awajishima also make large rest clusters, therefore it is interested to compare with them in Shodoshima.

Figure 1. Monkeys in Shiodoshima

Figure 2. Monkeys in Jigokudani

2) Zoo University symposium in Kochi

The theme of this symposium was "Care of disabled and old animals". Main subject of my study is rehabilitation and welfare on chimpanzees with a disability, therefore the symposium is very interested and gives good discussion for me, especially, caregiver's talks of these animals and their conflict and suffering against the care are very impressive for me. In Europe and the United States, euthanasia is one of the methods to be freedom from pain, however, Japanese tend to avoid it. I think that it is culture and their view of life and death in Japan, therefore it is not need to discuss which is right or wrong. In another point of view, we have to discuss the other methods of care to provide their well-being, I think. One caregiver, Yamada-san who is belonging to Noichi zoo in Kochi, told about rehabilitation and massage for an infant chimpanzee with cerebral palsy. He also commented that he could do the exercises and activities having confidences thanks of advice by specialist (e.g. physical/occupational therapists, professor of a university).

There are many problems in zoos in the present and future, especially care of "aging" animals in Japan. My topic is just only chimpanzees with a disability, but I have to research other species, body condition and aging in the future. I really feel not only pressure but also encouragement.

82. Others

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

	2015. 3, 31
Affiliation/Position	Primate Research Institute/D3
Name	Takashi Hayakawa

83. Country/location of visit

Shodoshima, Kagawa

84. Research project

PWS Shodoshima Field Course

85. Date (departing from/returning to Japan)

2015. 3. 12 – 2014. 3. 16 (5 days)

86. Main host researcher and affiliation

Choshikei, Osaru-no-kuni

87. 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.

We visited to Choshikei, Shodoshima, one of the field sites of provisioned Japanese monkeys. The purposes of this field course are (1) deep understanding of behavioral variability of Japanese macaques by comparison with other sites such as Yakushima, Koshima, Arashiyama, and Jigokudani and (2) learning of transmission of know-how of field study on members' own. These purposes are shared with last-year field course in Jigokudani. 17 members (including me) of Primate Research Institute and Japan Monkey Centre made the plan, went together from Inuyama to Shodoshima. After visit to Shodoshima, some members and I participated in "Zoo University" at Noichi Zoological Park of Kochi Prefecture in order to make poster presentations and communicated with zoo staff for discussion about animal study and welfare.

Interestingly, Japanese monkeys in Choshikei, Shodoshima have the very tolerant characteristics and then the distance between individuals is very short and they make the large cluster, so-called "sarudango" (Zhang and Watanabe 2007, *Primates*). This is very specific behavior in this area. Therefore, we decide the visit area as Choshikei in this year.

First, we leave Inuyama for Shodoshima using bus and ferry on March 12th. On the next day, we visited to Choshikei. Choshikei has 2 provisioned groups, where one has 200 individuals and the other has 300 individuals. As previously reported, they showed very short-distance between individuals and made large clusters that consist of 60 individuals seemingly to bear the cold weather of this March. As another interesting behavior, we observed food-snatching behavior in some adult females with infants, who directly snatched foods from mouth of their infants. This is also specific behavior in Choshikei, as previously reported (Hadi et al. 2013, *Primates*).

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

On March 13th, I and some members visited to Kochi, and the next day, we participated in "Zoo University" at Noichi Zoological Park. We learned about animal welfare focusing on disease, disorder, aging and death of animals in zoos in oral session. I made a poster presentation about last-year PWS Jigokudani field course and this Shodoshima PWS field course.

This 5-day visit provided many experiences and findings with me. I could believe to exploit these experiences for my future studies. I thank the staff of Chochikei Osaru-no-kuni for conducting this study tour, staff of Zoo University for organizing the symposium, professors and administrators of the PWS Leading Graduate Program for supporting the tour, and all of study members for organizing the tour by own.

88. Others

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

	2015. April, 3rd
Affiliation/Position	Primate Research Institute/D4
Name	Yena Kim

89. Country/location of visit
Japan, Shodoshima
90. Research project
Study on Japanese Macaque in Shodoshima
91. Date (departing from/returning to Japan)
2014. March. 12th – 2014. March. 14th (3days)
92. Main host researcher and affiliation
Dr. Matsuzawa, Professor at Primate Research Institute, Kyoto University
93. 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.
Among many of the well known field sites for studying wild Japanese macaques in Japan, Shodoshima is especially famous for the behavior of Japanese macaques embracing each other in a large group when they are resting (Fig 1). To observe this unique behavior one primate caretaker at Japan Monkey Center and 16 students from Primate Research Institute, including myself, went a field trip Shodoshima on 12th March. Since this trip was supported by the PWS and it aims at encouraging students to organize the entire trip by themselves, we had two meetings ahead of the trip to discuss what to prepare and how to schedule our trip. Personally, it came to me more special because I haven't had an opportunity to observe wild Japanese Macaques on the small islands, and simply due to the fact that this was going to be my last field trip in Japan during my PhD course. As a non-native Japanese speaker, I had a quite limited access to the information necessary for the trip, and therefore my role was to find local restaurants. It was perfect until I figured out that the most of the restaurants that I found are very far from the hotel. However, it was still very much enjoyable to be involved in organizing the trip with other members.

Figure 1. Japanese macaques are resting in a group embracing each other.

It took us almost an entire day to reach to the island from Inuyama, and therefore I was able to observe the monkeys on the next day. The weather was perfect with a beautiful sunshine, which made the hairs of the monkeys also beautifully shining. The first activity (?) that we had was to feed monkeys in the cage-like building which we could easily imagine the case of the zoo setting where the animals in a cage with a mesh wire while humans observing them from the outside, except the position of humans and the monkeys were reversed (Fig 2). The monkeys started to gather near the feeding area when we started feeding, and there we could observe some of the social interactions that they made, even though this was artificially produced setting. It was clear that there were some individuals definitely overfed due to its hierarchy but there were some individuals trying to find a best spot to sneak in to get the fruits.

Figure 2. Visitors are giving fruits to the Japanese macaques.

There were many interesting behaviors in Shodoshima macaques, but I was quite fascinated by the asymmetry of the nipples of the mothers (Fig 3). If I oversimplify, I could have studied the nipple preferences of Japanese macaque in Shodoshima in a day or two just with pictures of the parous females. It seemed that many of the mothers have longer left nipples, but systematic observations are necessary. Another interesting behavior was a stone handling. There were a couple of individuals playing or handling small stones and even carrying the stones with them, but I couldn't find any functional behaviors.

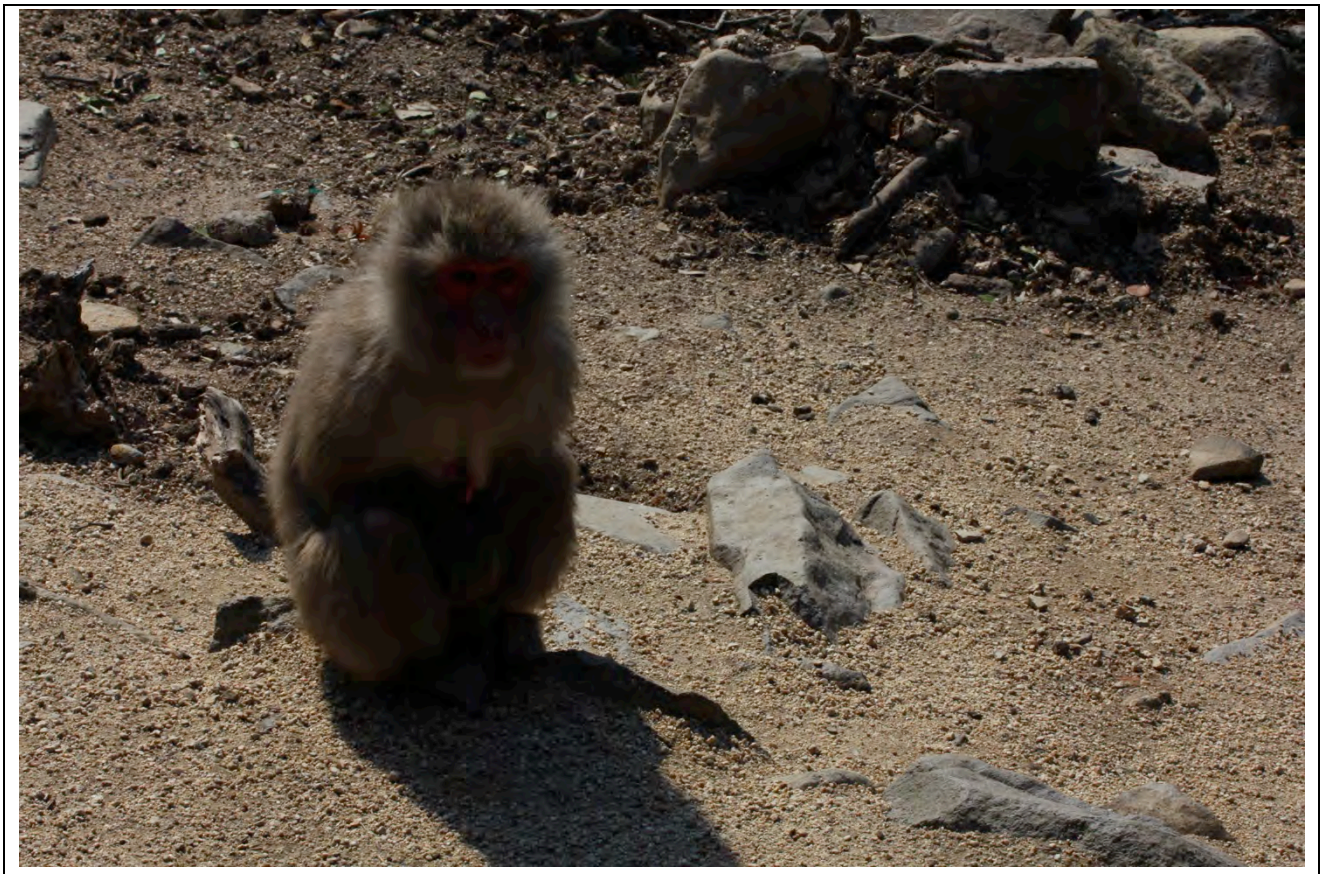


Figure 3. A female with asymmetric nipples.

Taken together, it was a great opportunity to be involved in organizing the study trip with others, and also inspiring to observe many interesting behaviors of Japanese macaques which vary a lot across different populations.

94. Others