

Leading Graduate Program  
in Primatology and Wildlife Science, Kyoto University

# Visit to Jigokudani: Snow Monkeys in the Hot Spring

March 10<sup>th</sup> – 12<sup>th</sup>, 2014



Reports by

1. Akiko Sawada
2. Yosuke Otani
3. Kim Yena
4. Anna Sato
5. Takashi Hayakawa
6. Lira Yu
7. Porawee Pomchote
8. Takeshi Atsumi
9. Sou Ueda
10. Yoko Sakuraba
11. Saori Suzuki
12. Nahoko Tokuyama
13. Rafaela Sayuri Cicalise Takeshita
14. Satoko Yamada
15. Yosuke Kurihara
16. Honami Sakata
17. Shoko Terada
18. Ryunosuke Kitajima
19. Aru Toyoda
20. Naoya Sugawara
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22. Yumi Yamanashi
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**Research Activity Report**  
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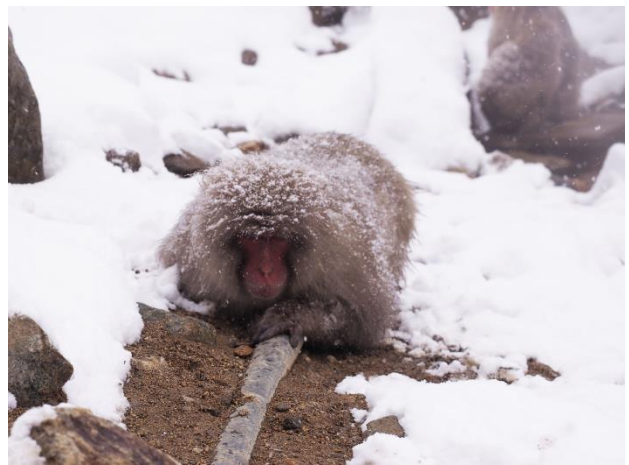
2014. March, 31	
<b>Affiliation/Position</b>	Primate Research Institute/Research fellow
<b>Name</b>	Akiko Sawada

<b>1. Country/location of visit</b>
Yamanouchi-cho, Shimotakai-gun, Nagano Prefecture, Japan
<b>2. Research project</b>
Field observation in Shiga Kogen
<b>3. Date (departing from/returning to Japan)</b>
2014. 03. 10 – 2014. 03. 12 (3days)
<b>4. Main host researcher and affiliation</b>
Jigokudani Yaen-Koen
<b>5. Progress and results of your research/activity (You can attach extra pages if needed)</b>
Please insert one or more pictures (to be publicly released). Below each picture, please provide a brief description.
<p>With other participants I visited the Jigokudani Yaen-Koen to observe Japanese macaques. As we know, the Jigokudani is one of the most popular places to see macaques in Japan. During our 3-day stay, we met at least a couple of hundreds of visitors to see famous “snow monkeys” and those enjoying a hot spring. The weather was the worst on the first day due to a snowstorm. It, however, turned out to be the best day to take pictures of macaques sitting in the hot spring. The weather was much better during the last two days and some macaques seemed to enjoy soaking up the sun in lemur- or meerkat-like style. One thing I really concerned about was visitors sometimes getting too close to macaques, which were extraordinarily well-habituated. I saw some people actually touching a macaque on the back. They were really lucky not to get attacked by the macaque. It is not very easy to make tourists keep distance from wild animals, especially from those well-habituated. We also have the same problem in Yakushima. People tend to get too close to macaques (consciously or not) while they are taking pictures. We all should be aware of our responsibility to build a healthy relationship with wild animals.</p>

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Sitting in the hot spring in a snowstorm



Warming himself up on a pipe with hot water flowing through it



Soaking up the sunlight on the day after the snowstorm



**6. Others**

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2014. 03, 29

<b>Affiliation/Position</b>	Ecology and Conservation, D3
<b>Name</b>	Yosuke Otani

**1. Country/location of visit**

Yamanouchi-machi, Shimotakai-gun, Nagano, Japan

**2. Research project**

Regional variations of behavioral pattern of Japanese macaques

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

2014.3.10 – 2014.3.12 (3 days)

**4. Main host researcher and affiliation**

Jigokudani Yaen-koen

**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.

I conducted 3 days observation on one group of Japanese macaques inhabiting Jigokudani Yaen-Koen. During this visit, I could exchange opinions from various viewpoints as I was accompanied by more than 20 students from various sections. Through this experience, interest in regional variations of behavior has occurred to me, and it would lead up to my new study on macaques.

I have been studied on Japanese macaques in Yakushima (*Macaca fuscata yakui*), however this was the first time to observe Japanese macaques living in snow.



(Left) *Macaca fuscata yakui* in Yakushima, (Right) *Macaca fuscata* in Jigokudani

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Through the observation, I got to know the difference in behavior between the monkeys in the two habitat, as well as some well-known physical differences (e.g. body weight, length of coat, coat color of infant).

One of these differences was infant carry behavior.



In Yakushima, usually mothers carried their infant on back or belly (Left), whereas mothers in Jigokudani carried on their lower back (Right). When mothers walking on snow, infants on mothers' belly may be trailed on snow surface. This would be one of possible reasons for that mothers hardly carried infants on their belly in Jigokudani. Infants on mothers' lower back may be able to reduce heat dissipation as they do not need to straddle. The two pictures suggest that infant can curl up when they ride on lower back, and this would be advantageous in the cold. To examine this, I would have to observe infant carry also in other seasons. Mothers and infant may change infant carry behavior in accordance with circumstances.

Another difference was Snowball construction.



Considerable number of individuals (mainly juveniles) made snowballs. In some cases, they ate wheat that was distributed and remained in the snowballs. However, in the other cases, they apparently played by the snowballs. A juvenile (Left) made many snowballs one after the other without any bite. This behavior may be related to provision. The snowball construction resemble

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stone handling behavior that have been observed in Arashiyama, Takasakiyama, and Shodoshima, where are well known as provision sites of Japanese macaques. Strong cohesiveness of individuals, which is achieved by feeding, may facilitate arising and transmission of these proto-culture.

I appreciate staffs of PWS for providing good opportunity. I would like to thank participants of this activity for companionship and valuable discussion. I am very grateful especially for Mr./Ms. T. Hayakawa, Y. Sakuraba, S. Suzuki, T. Atsumi, S. Yamada, who kindly arranged the activity at great effort.



**6. Others**

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2014. March, 31 <sup>st</sup>	
<b>Affiliation/Position</b>	Primate Research Institute/D3
<b>Name</b>	Yena Kim

<b>1. Country/location of visit</b>
Japan, Yamanoguchi, Nagano prefecture
<b>2. Research project</b>
Study on Japanese Macaque in Jigokudani
<b>3. Date (departing from/returning to Japan)</b>
2014. March. 10 <sup>th</sup> – 2014. March. 12 <sup>th</sup> (3days)
<b>4. Main host researcher and affiliation</b>
Dr. Matsuzawa, Professor at Primate Research Institute, Kyoto University
<b>5. Progress and results of your research/activity</b> (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.
<p>The research trip supported by PWS Leading graduate program was conducted from 10<sup>th</sup> to 12<sup>th</sup>, March. Twenty-seven students participated. I used this opportunity to observe wild Japanese macaques in Jigokudani Yaenkoen. Before departure, we had a small meeting to discuss about what to prepare and what to do in the field and it helped us be well prepared for the trip. The placed we visited, Jigokudani Yaenkoen, is the only place in Japan where people can observe wild monkeys bathing in hot springs. After 5 hours of long travel by bus, our group reached the kanbayashi onsen area covered in the snow. Thanks to the meeting, every student was very well equipped for the trekking in the snow carrying heavy backpacks full of foods. When we reached the ryokan after 30 min walking, we had seen many Japanese monkeys on the trees, in the hot springs, and even in the ryokan. After eating nice soba noodles for the late lunch, we had time to relax in the hot springs and to look around the places. It was cold and windy at night but I could enjoy watching monkeys in the room through the window. I had seen a group of monkeys resting on the tree, a juvenile monkey walking bipedally, and mothers carrying babies on her back. My first night at the Yaenkoen had passed like that. It was perfect weather on a second day for observing monkeys. The sky was clear and sun was shining. Just 5 minutes after walking, we found monkeys at the Yaenkoen foraging for provisioned foods in the snow. Some of them were playing and some of them were resting in the hot springs. Every student was so busy taking pictures of the monkeys and observing their interesting behaviors. I also took quite a number of pictures of monkeys (more than 1000), but only a couple of them were good. On the last day I visited Shibu onsen and enjoyed the foot bath. This trip was not only helpful for the students to develop a clear vision on studying wild primates in general but also</p>



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to make a good connection among students who were all from different research fields.



A Japanese monkey is enjoying the hot spring.



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A Japanese monkey is foraging for provisioned foods.

**6. Others**

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2014. 3, 31

<b>Affiliation/Position</b>	The third year of PH.D, Primate Research Institute of Kyoto University
<b>Name</b>	Anna Sato

<b>1. Country/location of visit</b>
Yamanouchi-machi, Shimotakai-gun, Nagano, Japan
<b>2. Research project</b>
Consideration for the relation between wild animals and human beings
<b>3. Date (departing from/returning to Japan)</b>
2014.3.10 – 2014.3.12 (3 days)
<b>4. Main host researcher and affiliation</b>
Jigokudani Yaen-koen
<b>5. Progress and results of your research/activity</b> (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 time, I observed the wild Japanese macaques in Jigokudani Yaen-koen. They are called snow monkeys. When I participated in International Primatological Society, I met many primatologists who had been to Japan to see the snow monkeys. So it was great time to observe real snow monkeys. The purpose of this investigation was to get an opportunity to consider the relation between wild animals and human beings. Through this experience, I have developed a clear vision on how to cope with wildlife parks, which will be of great help in the future conservation of them. I am grateful that PWS have given me this kind of opportunity.
 
<b>6. Others</b>

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2014. 3, 31	
<b>Affiliation/Position</b>	PhD student (D2), Primate Research Institute, Kyoto University
<b>Name</b>	Takashi Hayakawa

<b>1. Country/location of visit</b>
Yamanouchi-machi, Shimotakai-gun, Nagano, Japan
<b>2. Research project</b>
Observation of a provisioned troop of wild Japanese macaques in Jigokudani in winter
<b>3. Date (departing from/returning to Japan)</b>
2014.3.10 – 2014.3.12 (3 days)
<b>4. Main host researcher and affiliation</b>
Jigokudani Yaen-koen
<b>5. Progress and results of your research/activity</b> (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.
<p>Japanese macaques are the most northern living non-human primate, as is well known as snow monkeys; however, not all students of Primate Research Institute (PRI) have observed Japanese macaques in the snow. This is because there are not only PRI students who belong to the ecology section but also ones who belong to various primatological sections such as cognitive science, molecular biology, morphology, and neuroscience, which do not necessarily conduct fieldwork. Many of us thought that we could acquire a new way and view of primatology if we visit field sites of “unknown” snow monkeys in winter regardless of our study sections and academic year of us and thus exchange opinions about wild monkeys each other from a different interdisciplinary viewpoint of each primatological section. In this project, we organized and performed study tour to Jigokudani Yaen-Koen, which is one of the famous places of snow monkeys. A total of 26 members of PRI and Wildlife Research Center (including 19 graduate students) visited the place.</p> <p>This project started at the end of December of 2013. Some PRI students of the doctor course, including me, submitted this project to the office of Leading Graduate Program of Primatology and Wildlife Science (PWS). After this project was accepted, we called other students and PRI/WRC members and also make detailed schedule and contents for this study tour—arranging a bus and an inn used to visit and stay at the place, making a guidebook describing member list, what to bring, clothes for the snowy season, schedule of the days, and geographic information of the place. Such planning procedure by students themselves was also purpose of this study tour in order to learn how to organize fieldwork.</p>

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**Photo 1.** From Kambayashi to Korakukan by foot in the snowfall.

**March 10<sup>th</sup>, 2014.** We all members left PRI at 9:00 am by a chartered bus. With two short breaks at the service areas of highway, we arrived at the Kambayashi area. We had intense snow, but we walked the snowy road in the woods for half an hour. We arrived at an inn, Korakukan at 2:00 pm, and took a late lunch. Because Korakukan is a 5-minute walk from Jigokudani Yaen-Koen, several members of us visited there to watch monkeys in the snowfall. Other members and I stayed at the inn and were prepared for the investigation of tomorrow. At the time, we found more than 10 wild monkeys in open-air hot springs of the inn. Some monkeys soaked in bathes, and other monkeys got warm by sticking to hot pipes of the springs. We could readily observe snow monkeys in the first day.



**Photo 2.** Snow monkeys and an open-air hot spring.

**March 11<sup>th</sup>, 2014.** We took a breakfast at 8:00 am. After making rice balls for the lunch, we visited Jigokudani Yaen-Koen. It was a beautiful sunny day and thick snow cover remained; therefore, we fortunately had nice condition to observe snow monkeys. We greeted the staff of Jigokudani Yaen-Koen, took a group photo, and then, started to observe snow monkeys. According to the staff, there were approximately 160 monkeys there. I did not discriminate the individuals of monkeys, but I found various individual characteristics of the monkeys. Especially, individual differences of behavior for hot spring utilization were prominent. Some old female monkeys soaked in the hot spring long (at least 30 minutes), some female adults groomed each other in the hot spring, and some offspring swam “amusingly,” whereas many adult males seemingly avoided soaking. Such differences were reported by Zhang et al. 2007 (*American Journal of Primatology*).

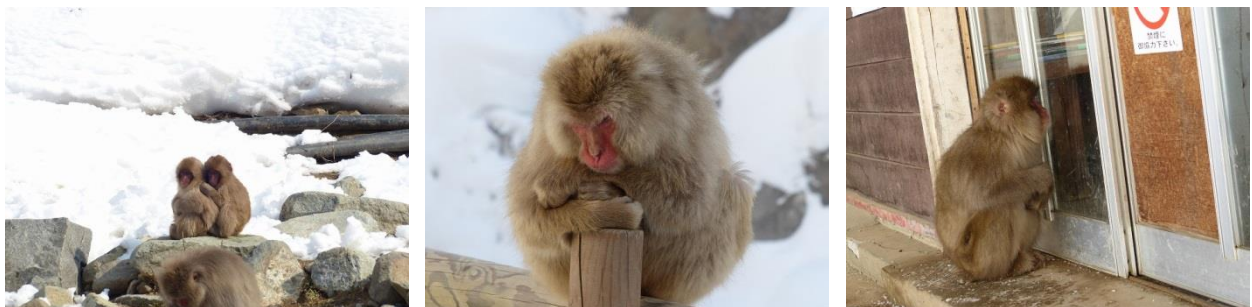
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**Photo 3.** Snow monkeys of Jigokudani Yaen-Koen.



**Photo 4.** Snow monkeys in the hot spring.



**Photo 5.** Jigokudani monkeys have various characteristics.

Many members and I observed the snow monkeys throughout the day. In the evening of the day, we had a lot of discussion for observed snow monkeys.

**March 11<sup>th</sup>, 2014.** We had free time in the morning. Some members visited Jigokudani Yaen-Koen again, and other members visited other places to watch nature of Jigokudani or interact with local people. I chose to visit Jigokudani Yaen-Koen again. The day is also fine, but snow of yesterday was melting. Thus, I enjoyed three different aspects of snow monkeys in the three days of this tour. Coming back to Kambayashi, we left there at 1:00 pm. I thought that to eat and sleep together in

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this fieldwork of snow monkeys must have helped each of us to make a new viewpoint of each primatological study, and made a role model of fieldwork.



**Photo 6.** Group photo of this tour in Jigokudani Yaen-Koen.

## **6. Others**

I thank the staff of Jigokudani Yaen-Koen and Korakukan for conducting this study tour, professors and administrators of the PWS Leading Graduate Program for supporting the tour, and all of study members for organizing the tour by ourselves.

**Research Activity Report**  
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2014. March, 28

<b>Affiliation/Position</b>	Language and Intelligence Section, PhD student
<b>Name</b>	Lira Yu

<b>1. Country/location of visit</b>
Yamanouchi-machi, Shimotakai-gun, Nagano, Japan
<b>2. Research project</b>
Observation of wild Japanese macaques in Jigokudani Monkey Park
<b>3. Date (departing from/returning to Japan)</b>
2014.3.10 – 2014.3.12 (3 days)
<b>4. Main host researcher and affiliation</b>
Jigokudani Yaen-koen
<b>5. Progress and results of your research/activity</b> (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.
<p>During this trip, I observed wild Japanese macaques in Jigokudani Monkey Park at Nagano prefecture. The monkeys in this region is called “snow monkey” since snow falls a lot during winter. I used this opportunity to see how snow monkeys live in this extremely cold natural habitat. Bathing in hot spring is well known behavior for escaping winter cold in these monkeys. I observed several monkeys jumping into hot spring. I got an impression that monkeys go inside of hot spring to take foods which were provisioned by humans, while some of the monkeys bath voluntarily. Other behaviors, such as foraging in snow, self and social grooming, social play between juveniles and infant caring by mother monkeys, were observed. Through this experience, I was able to observe several behavior repertoires of wild snow monkeys in Jigokudani Monkey Park. Moreover it was a great chance to think about an importance of conserving population of wild Japanese macaques and the better way to conserve unique behaviors which may have adaptive function in their own natural habitat.</p>



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Figure 1. One adult snow monkey in hot spring before provisioning.



Figure 2. Several snow monkeys in hot spring after provisioning.



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Figure 3. Foraging snow monkey in snow.



**6. Others**

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2014. 03. 28

<b>Affiliation/Position</b>	Primate Research Institute, Kyoto University/D3 student
<b>Name</b>	Porrawee Pomchote

<b>1. Country/location of visit</b>
Yamanouchi-machi, Shimotakai-gun, Nagano, Japan
<b>2. Research project</b>
Ecological observation of wild Japanese macaques ( <i>Macaca fuscata</i> )
<b>3. Date (departing from/returning to Japan)</b>
2014.3.10– 2014.3.12 (3 days)
<b>4. Main host researcher and affiliation</b>
JigokudaniYaen-koen
<b>5. Progress and results of your research/activity</b> (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.
<p>The Jigokudani Yaen-koen is a spectacular place for close observation of wild Japanese monkeys. Normally it is rather hard to observe the behavior of wild monkeys in nature because they are not familiar with humans, so they always keep their distances or retreat into deep forests and steep mountains. However, at the park, monkeys are always fed by staff of the park. They realize that whenever they come to feeding areas they can get food. The park also prepares an onsen (hot spring) for them so that they can relax and enjoy winter time. The above reasons are incentives for us to observe behavior of the monkeys closely.</p> <p>After 3 days of observation I found some interesting behaviors. From the park data, there is 1 troop of monkeys composing of approximately 160 individuals. I found that most of the monkeys gather at the feeding areas both before and after feeding, while others were around the old Japanese style hotel “Korakukan”, opened in 1864, or were along the river. There are 2 onsens where the monkeys can access anytime: the outdoor of humans’ onsen at the hotel and the monkeys’ onsen at the park area. There are some reasons why many monkeys take baths. They seem to be relaxed and comfortable because I observed that some of them fell asleep while using onsens. They ate food in the monkeys’ onsen where a staff gave food to them. I observed some monkeys stay in the humans’ onsen for more than 1 hour. However, it is not a good idea to use the outdoor human onsen with monkeys because they discharge their urine and feces in both onsens. Because the mountain is rather steep and deep and the sun’s rays cannot reach the ground, so the monkeys may use hot springs to overcome cold. I found that the food offered by the staff may be barley or soy bean which</p>

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are placed on the ground or into the monkeys' onsen. In my point of view, it has pros and cons. Monkeys can get good food supplements compared to their normal diet especially in winter time such as barks, leaves, flowers, or grass. Feeding monkeys with artificial food provides us excellent chance to observe them in close scrutiny. However, giving them food may alter their original wild behavior, making them familiar with humans. The monkeys always ignore me or others when we approach them closely but when I accidentally stared their eyes, they showed aggressive and threatening behavior. Thus, we should be careful not to trigger this situation. In my country, everyone can give food to monkeys and this led to the alteration of monkey behavior. They expect to receive food from humans, so if they do not get food they try to snatch or steal bags or other things. In sum, I support feeding monkeys only by the staff of the park because the monkeys will realize that they can get their food from staff only and we can observe their behavior very closely. Before feeding time, I saw many of them searching for something and/or eating snow. I suppose that they may need some minerals that cannot be obtained from plants. After eating, the monkeys spent time for grooming, playing, or resting. Grooming is a crucial social activity and a means by which animals who live in proximity may buttress social structures and relationships. The monkeys groomed each other both on the ground and in the onsens. Reciprocated grooming, the groomee becoming the groomer, was observed in this troop. Young and adolescent monkeys tend to engage in playing activities such as like jumping, climbing, or chasing each other, while adults have a tendency to rest or sleep. Sometimes conflicts happen; however, they are not serious. Difference in body size is not the main factor when the monkeys fight. I observed many smaller monkeys are more dominant than bigger ones. Japanese monkeys are social animals and they have social hierarchy, so rank is more influential than body size when fighting or competing for food. At the parking office, I also observed many pictures of male monkeys who are believed to be bosses or alpha males. After that, I tried to track down the current boss of this troop, but unfortunately I could not find him. This may be because of abundant food, no tough fights, no enemies, and/or not breeding season.

In Thailand, there are 13 species of nonhuman primates including 5 species of macaques (genus *Macaca*). Among those long-tailed macaques (*M. fascicularis*) are the most commonly found species. They are seen in the forest, parks, temples, or human living areas. Because of deforestation and expanding of agricultural and urban areas, the overlapping areas between long-tailed macaques and humans increased. The conflict between macaques and humans has increased widely and severely. In the future, if we can consider the Jigokudani Yaen-koen as a model, conflicting problems between macaques and humans may be solved for example in some forest areas where are boundaries between macaques and humans can be developed to be behavioral conservation areas including sightseeing or recreation parks or settling feeding areas exclusively by staff for monkeys in urban areas etc.

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“One Fine Day”

**6. Others**


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2014. 3. 24


<b>Affiliation/Position</b>	Primate Research Institute Kyoto University
<b>Name</b>	Takeshi Atsumi

<b>1. Country/location of visit</b>
Yamanouchi-machi, Shimotakai-gun, Nagano, Japan
<b>2. Research project</b>
A field research for observation practices of wild Japanese monkeys
<b>3. Date (departing from/returning to Japan)</b>
2014.3.10 – 2014.3.12 (3 days)
<b>4. Main host researcher and affiliation</b>
Jigokudani Yaen-koen
<b>5. Progress and results of your research/activity</b> (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.
<p>Jigokudani Yaen-koen is the monkey park where people can observe bathing wild snow monkeys. We went to there to examine whether this park is suitable for students who learn primatology.</p> <p>To maintain monkeys' bathing, the caretakers feed the monkeys, but they don't interfere monkeys' lives excepting this feeding. Moreover, monkeys have well habituated to humans so that visitors can observe monkeys' wild lives in the vicinity. These suggest that this park is well suited for beginners' observation practice.</p> <p>I am a laboratory worker, so this was the first time to see actual wild monkeys' lives. I planed the bus schedule for this trip and learned how to do that. I hope this experience will be helpful for this kind of study tours in the future.</p>

Figure: bathing monkeys. We could see them closely.
<b>6. Others</b>

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2014. 3, 30

<b>Affiliation/Position</b>	Primate Research Institute/D1
<b>Name</b>	Sou Ueda

<b>1. Country/location of visit</b>
Yamanouchi-machi, Shimotakai-gun, Nagano, Japan
<b>2. Research project</b>
Observation of Japanese monkey in the snow and the hot spring
<b>3. Date (departing from/returning to Japan)</b>
2014.3.10 – 2014.3.12 (3 days)
<b>4. Main host researcher and affiliation</b>
Jigokudani Yaen-koen
<b>5. Progress and results of your research/activity</b> (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.
<p>At Jigokudani Yaen-koen, we observed Japanese monkeys going into the hot spring in the snow. Especially, on the snow day, a lot of individual were in the hot spring. I was interested in the behavioral transmission of the hot spring. Also it was great opportunity to observe Japanese monkeys in the field and to discuss with graduate students in other discipline.</p>

We walked on the snow road for 30 minutes.



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The hotel where we stayed. Monkeys also come here to go into the hot spring.



The monkeys in the hot spring and snow.



Mounting after the aggression.

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1 year old infants were playing.

**6. Others**

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2014. 3, 24

<b>Affiliation/Position</b>	PhD student, Primate Research Institute, Kyoto University
<b>Name</b>	Yoko Sakuraba

<b>1. Country/location of visit</b>
Yamanouchi-machi, Shimotakai-gun, Nagano, Japan
<b>2. Research project</b>
Observation of Japanese macaques which have a culture of “bathing”
<b>3. Date (departing from/returning to Japan)</b>
2014.3.10 – 2014.3.12 (3 days)
<b>4. Main host researcher and affiliation</b>
Jigokudani Yaen-koen
<b>5. Progress and results of your research/activity</b> (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.
<p>I had never seen monkeys in snow and in hot-spring until this tour. In this trip, I focused on their life style in snow and their culture of bathing by observation and information from staff. As a result of observation, I found that a few monkeys were in the hot-spring and almost monkeys were in the sun in this day (Fig 1). The staff said that it is more effective to be in the sun than to take a bath such a sunny and warm day. On their “bathing” culture, I could hear interesting talk from staff. The monkeys already have taken the hot-spring in Korakukan, a hotel which is nearest Yaen-Koen (Fig 2), from this hotel opened in 1863. It means their culture has continued more 100 years. And it was interesting that only females and children take a bath, not males, in staff talk. It is different situation, comparing to monkeys in Koshima, it is famous to have culture of potato and wheat washing. I want to observe them in detail focusing on “Culture”.</p>
<div style="display: flex; justify-content: space-between;"> <div style="width: 45%;">  <p>Fig 2. “Korakukan”, a hotel which is nearest Yaen-Koen. It opened on 1863.</p> </div> <div style="width: 45%;">  <p>Fig 1. A monkey in the sun</p> </div> </div>
<b>6. Others</b>

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**Research Activity Report**  
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	2014. March, 28
<b>Affiliation/Position</b>	Center of Human Evolution Modeling Research, Doctoral 1 (JSPS Research Fellow)
<b>Name</b>	Saori Suzuki

<b>1. Country/location of visit</b>
Yamanouchi-machi, Shimotakai-gun, Nagano, Japan
<b>2. Research project</b>
Practical training of field work in Shigakogen Jigokudani; Observation of Snow Monkey in Hot spring.
<b>3. Date (departing from/returning to Japan)</b>
2014.3.10 – 2014.3.12 (3 days)
<b>4. Main host researcher and affiliation</b>
Jigokudani Yaen-koen
<b>5. Progress and results of your research/activity</b> (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.
<p>In this tour, we observed Japanese Macaques called ‘Snow Monkey’ in Jigokudani Yaen-Koen. I’ve had great interests in them, because Japanese Macaques in the hot spring are rare in Japan. Furthermore, this training is good chance to learn how to cooperate in the field with colleagues.</p> <p>In Yaen-Koen, about 160 Japanese Macaques organize one group. According to the staff, not all of the macaques take the hot spring, almost only female macaques and children holding their mother do it. And surprisingly, in contrast to human the macaques getting out of the hot spring don’t get cold even they remain their bodies wet, because they don’t sweat as much as human and they have a high tolerance for cold. But in warm weather, they seemed to prefer warming themselves by sunlight on the land.</p> <p>The staff in Yaen-Koen feed the macaques under tight control of amount and kinds of food not to disturb their life style in the wild. And this system is established in order to observe wild Japanese Macaques easily. The Yaen-Koen give great chance to consider environment conservation and coexistence with wild monkey to not only researchers but also public.</p> <p>This tour became so valuable experience because I usually study in laboratory room. I believe this experience will help my study in the future. I’m very appreciative of what Prof. Matsuzawa gave us this opportunity and I also thank everyone for cooperation of this tour.</p>

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Japanese Macaques in the hot spring



The entrance of Yaen-Koen



The tour members observing Snow Monkey



Children Macaques playing in the snow

**6. Others**

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2014. 3, 28

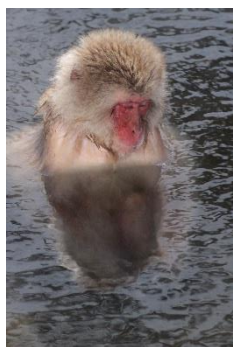
<b>Affiliation/Position</b>	Primate Research Institute, Ecology & Social Behavior, D1 student
<b>Name</b>	Nahoko Tokuyama

<b>1. Country/location of visit</b>
Yamanouchi-machi, Shimotakai-gun, Nagano, Japan
<b>2. Research project</b>
Observation of semi-provisioned Japanese macaque at Jigokkudani Monkey Park
<b>3. Date (departing from/returning to Japan)</b>
2014.3.10 – 2014.3.12 (3 days)
<b>4. Main host researcher and affiliation</b>
Jigokudani Yaen-koen
<b>5. Progress and results of your research/activity</b> (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.
26 members, from Primate Research Institute and Wildlife Research Center, visited Jigokudani Monkey Park and observed the semi-provisioned Japanese macaques. I studied aggressive behavior of semi-provisioned Japanese macaques at Arashiyama monkey park Iwatayama, Kyoto. So I focused on the difference of the aggressive behavior between Arashiyama and Jikokudani. In jikokudani, the frequency of counter aggression was more often than that in Arashiyama. The dominance hierarchy might be milder in Jikokudani. After the aggression, the aggressee performed stress related behaviors (self-scratching, self-grooming, yawning, shivering...) much more often than the monkeys do in Arashiyama. Also, I observed the behavior that two 1 year old monkeys walk joining their shoulders over 20 m twice. I've never observed such behavior in Arashiyama. It is important to understand that behaviors of animal are different between groups. During this trip, I keenly realized the importance, because I observed a lot of difference between two semi-provisioned groups.

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Aggressive behavior



A monkey enjoying the hotspring

**6. Others**



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2014. 03. 14	
<b>Affiliation/Position</b>	Department of Ecology and Social Behavior, Primate Research Institute
<b>Name</b>	Rafaela Sayuri Cicalise Takeshita

<b>1. Country/location of visit</b>
Yamanouchi-machi, Shimotakai-gun, Nagano, Japan
<b>2. Research project</b>
Jigokudani monkey park tour
<b>3. Date (departing from/returning to Japan)</b>
2014.3.10 – 2014.3.12 (3 days)
<b>4. Main host researcher and affiliation</b>
Jigokudani Yaen-koen
<b>5. Progress and results of your research/activity</b> (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.
<p>During this visit, I could observe the Japanese monkeys and meet the Director and staffs of the park. Because Jigokudani is where I will be conducting my research from April, the tour was a great opportunity for me to have an overview of the conditions of the field site, to get information about the subjects, and to define the methods of data collection for my study.</p>

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Figure 1. Japanese monkeys in the hotspring at Jigokudani Monkey Park

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Figure 2. Aggressive interaction between two Japanese monkeys at Jigokudani Monkey Park

**6. Others**

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2014.3.19

<b>Affiliation/Position</b>	Primate Research Institution Cognition and Learning section master's course
<b>Name</b>	Satoko Yamada

<b>1. Country/location of visit</b>
Yamanouchi-machi, Shimotakai-gun, Nagano, Japan
<b>2. Research project</b>
Observation of snow monkeys
<b>3. Date (departing from/returning to Japan)</b>
2014.3.10 – 2014.3.12 (3 days)
<b>4. Main host researcher and affiliation</b>
Jigokudani Yaen-koen
<b>5. Progress and results of your research/activity</b> (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.
<p>First day</p> <p>It was snowing hard and it was cold, we could see the snow monkey in the hot spring. There were more monkeys outside of hot spring than inside. They were sitting on the warm pipes which bring the hot water.</p> <div style="display: flex; justify-content: space-around; align-items: center;"> <div style="text-align: center;">  <p>Monkeys in the hot spring</p> </div> <div style="text-align: center;">  <p>Monkey on the warm pipe</p> </div> </div> <p>Second day</p> <p>We went to the Jigokudani Yaen koen.</p> <p>It was warmer day, less monkeys soaked in the hot spring than I expected. Staff of the Jigokudani Yaen Koen told us that monkeys do not really like hot spring, and adult males do not soak in the hot spring. As he told us, adult males did not soak in the hot spring.</p>

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Third day

It was even warmer than second day. A few monkeys were in the hot spring. When the staff threw the wheat into the hot spring, some monkeys came to the hot spring. But adult males just take the wheat on the surface of water, they did not try to soak in. Some monkeys drank the hot spring. Monkeys tend to sit the place where are not covered by snow.



**6. Others**

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2014. 3. 17

<b>Affiliation/Position</b>	Primate Research Institute/M2
<b>Name</b>	Yosuke Kurihara

<b>1. Country/location of visit</b>
Yamanouchi-machi, Shimotakai-gun, Nagano, Japan
<b>2. Research project</b>
Visit to the Shiga-Height
<b>3. Date (departing from/returning to Japan)</b>
2014.3.10 – 2014.3.12 (3 days)
<b>4. Main host researcher and affiliation</b>
Jigokudani Yaen-koen
<b>5. Progress and results of your research/activity</b> (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.
<p>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 Jigokudani contributes to understanding the intraspecific variation of Japanese macaques.</p> <p>I conducted behavioral observation in Jigokudani Monkey Park for three days. About 160 individuals in a group have been provisioned in the park, and the monkeys were fully habituated to human observers.</p> <p>Monkeys changed the type of thermoregulatory behavior according to the weather. Hot-spring bathing was observed on a cold, snowy day. On a sunny day, most of the monkeys did not do hot-spring bathing but sunbathing. Hot-spring bathing is effective for thermoregulation. However, monkeys may avoid getting wet when they can do sunbathing on a sunny day.</p> <p>Monkeys spent a long time for feeding on wheat (a provisioned food) in the park. Outside the park, I could observe them feeding on bark. Surprisingly, 15 individuals fed on bark in a three-meters-high tree. Compared to fruits which are clumped within the tree crown, feeding competition over bark rarely occurs because bark is low-quality and uniformly distributed within it. Such food condition may allow a lot of monkeys to stay in the same patch.</p> <p>Through this practice, I realized again the importance of research in provisioned populations, and developed an understanding of the intraspecific variation of Japanese macaques.</p>

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Monkeys in the hot spring



Monkeys feeding on bark in the tree

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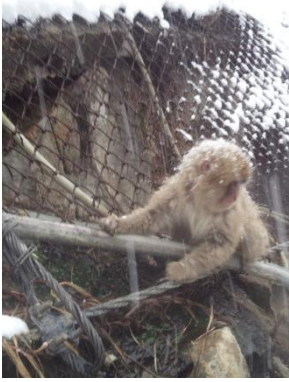


<b>6. Others</b>



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2014. 3, 27

<b>Affiliation/Position</b>	Kyoto Univ., PRI, cognitive neuroscience
<b>Name</b>	Honami Sakata


<b>1. Country/location of visit</b>
Yamanouchi-machi, Shimotakai-gun, Nagano, Japan
<b>2. Research project</b>
Observation of wild Japanese macaque in Jigokudani
<b>3. Date (departing from/returning to Japan)</b>
2014.3.10 – 2014.3.12 (3 days)
<b>4. Main host researcher and affiliation</b>
Jigokudani Yaen-koen
<b>5. Progress and results of your research/activity</b> (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 visited Jigokudani Yaen-koen, and observed wild Japanese macaques. I heard that Japanese macaques are called “snow monkey” overseas, and this time I can understand the reason. It was snowing, and Japanese macaques enjoyed hot springs. It was very impressive scene. This observation was very valuable for me.
<div style="display: flex; justify-content: space-around; align-items: flex-start;"> <div style="text-align: center;">  <div style="border: 1px solid black; padding: 5px; width: fit-content; margin: 5px auto;">a baby monkey</div> </div> <div style="text-align: center;">  <div style="border: 1px solid black; padding: 5px; width: fit-content; margin: 5px auto;">snow on monkeys</div> </div> <div style="text-align: center;">  <div style="border: 1px solid black; padding: 5px; width: fit-content; margin: 5px auto;">Wild Japanese macaques in the hot springs</div> </div> </div>

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<b>6. Others</b>

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2014. 03. 31	
<b>Affiliation/Position</b>	Primate Research Institute/ M2
<b>Name</b>	Shoko Terada

<b>1. Country/location of visit</b>
Japan/Jigokudani Nagano-ken
<b>2. Research project</b>
Observation of snow monkey in Jigokudani
<b>3. Date (departing from/returning to Japan)</b>
2014.03. 10 – 2014. 03. 12 (3days)
<b>4. Main host researcher and affiliation</b>
Jigokudani yaenn park
<b>5. Progress and results of your research/activity</b>
<p>Japanese monkey is known for snow monkey. In addition, snow monkeys only live in Jigokudani take a hot spring bath. They are very calm for human. If we walk up to snow monkey, they don't run away and attack. I think Koushima monkey is more offensive.</p> <p>I found difference Japanese monkey culture and importance to observe wildlife.</p>

<b>6. Others</b>

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2014. March, 30	
<b>Affiliation/Position</b>	Primate Research Institute, molecular biology section, master course student
<b>Name</b>	Ryunosuke Kitajima

<b>1. Country/location of visit</b>
Yamanouchi-machi, Shimotakai-gun, Nagano, Japan
<b>2. Research project</b>
Observation of “Snow monkey” in Jigokudani monkey park
<b>3. Date (departing from/returning to Japan)</b>
2014.3.10 – 2014.3.12 (3 days)
<b>4. Main host researcher and affiliation</b>
Jigokudani Yaen-koen
<b>5. Progress and results of your research/activity</b> (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.

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For this practice, we intended three points to learn.

1<sup>st</sup>: learning field work

2<sup>nd</sup>: Observe wild Japanese macaques (“snow monkey”)

3<sup>rd</sup>: Learn how to plan trip

In my point of view, our intents were completed.

About 1<sup>st</sup> point, I learned appropriate clothes to wear in a winter mountain. And 2<sup>nd</sup>, I could see the differences of behavior among individuals depends on their age and sex (relationship between mothers and infants). About 3<sup>rd</sup> point, though I didn't participate into planning, I learned that it is important to announce their plan clearly to all of members. Sometimes, there were some participants who don't know what to do next.

Related to 1<sup>st</sup> and 2<sup>nd</sup> aim, I could find how it is important to decide the level of observation in field work. Without focusing any objects, I couldn't find any rules of behavior. Though I am studying about cell biology, the finding is important and can be applied to my research field.



Saru-dango ?



jumping monkey





monkeys on the riverside

**6. Others**

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2014. 3, 31

<b>Affiliation/Position</b>	Primate Research Institute of Kyoto University / Master student
<b>Name</b>	Aru Toyoda

<b>1. Country/location of visit</b>
Yamanouchi-machi, Shimotakai-gun, Nagano, Japan
<b>2. Research project</b>
Visit to the Shiga-Heights: Snow monkeys in the hot spring
<b>3. Date (departing from/returning to Japan)</b>
2014.3.10 – 2014.3.12 (3 days)
<b>4. Main host researcher and affiliation</b>
Jigokudani Yaen-koen
<b>5. Progress and results of your research/activity</b> (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.
<p>We observed snow monkeys in the hot spring. If you search in a keyword of "Japanese macaque" in Google, you will find many of monkeys' photos which were taken at Jigokudani. Jigokudani is very famous sightseeing spot for foreign people as the place where we can see that the monkeys are taking a hot spring.</p> <p>It was the first time for me to visit Jigokudani Monkey Park. Unfortunately, it was too late to observe sexual behavior (I study sexual behavior in Japanese macaque) so I couldn't compare with my study site, but I could find many difference on other points. It was so great time for me, and I got many questions about them. I really appreciate the PRI Students Committee and PWS Leading program to gave me such a worthwhile opportunity.</p>
<div style="display: flex; justify-content: space-around;"></div>
<b>6. Others</b>

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2014. 3, 31

<b>Affiliation/Position</b>	Systems Neuroscience M1, PRI
<b>Name</b>	Naoya Sugawara

<b>1. Country/location of visit</b>
Yamanouchi-machi, Shimotakai-gun, Nagano, Japan
<b>2. Research project</b>
Observation of Japanese macaques at Jigokudani
<b>3. Date (departing from/returning to Japan)</b>
2014.3.10 – 2014.3.12 (3 days)
<b>4. Main host researcher and affiliation</b>
Jigokudani Yaen-koen
<b>5. Progress and results of your research/activity</b> (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 trip to Jigokudani, I observed wild Japanese macaques behaviors. We neuroscientists use macaques in experiments but we don't know lot about what they are or do in wild. Through this opportunity, I could gain insight into Japanese macaques and field works.



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Monkeys enjoying hot spring.

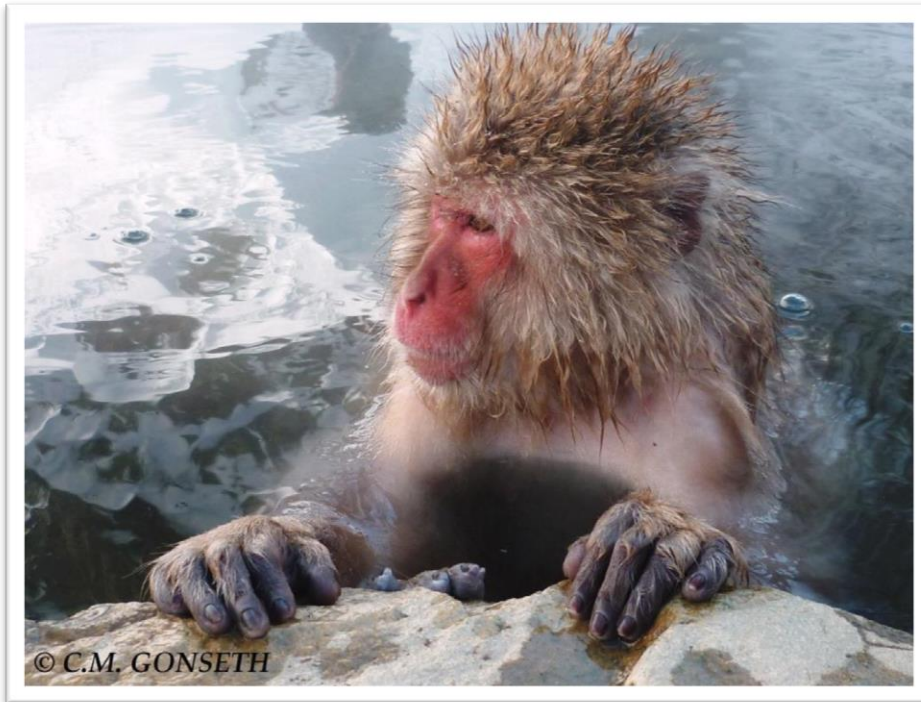
**6. Others**

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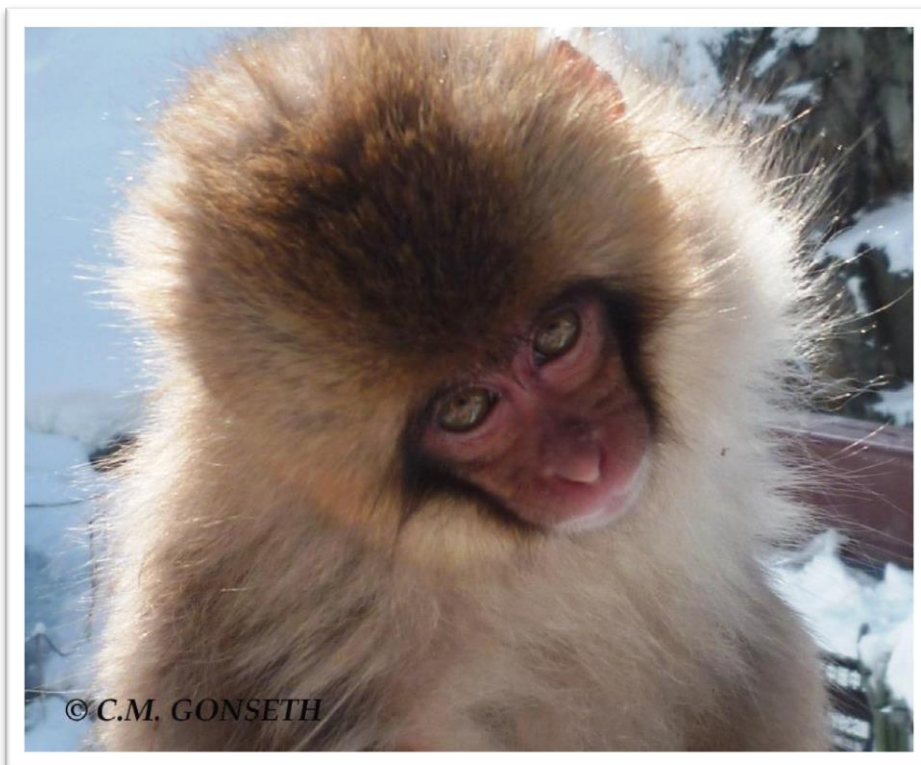
2014. 03, 13	
<b>Affiliation/Position</b>	Primate Research Institute (Language & Intelligence Section) / JSPS postdoctoral fellow
<b>Name</b>	Chloe Marie GONSETH

<b>1. Country/location of visit</b>
Japan / Jigokudani (Yamanouchi, Shimotakai District, Nagano Prefecture)
<b>2. Research project</b>
Observation of Snow Monkeys (Japanese Macaque, <i>Macaca fuscata</i> )
<b>3. Date (departing from/returning to Japan)</b>
2014. 03. 10 – 2014. 03. 12 (3 days)
<b>4. Main host researcher and affiliation</b>
Jigokudani Yaen Kōen
<b>5. Progress and results of your research/activity (You can attach extra pages if needed)</b>
Please insert one or more pictures (to be publicly released). Below each picture, please provide a brief description.
<p>I am currently a JSPS postdoctoral fellow at the Primate Research Institute of Kyoto University (Language and Intelligence Section), under the supervision of Tomonaga sensei.</p> <p>I aim at better understand the evolution of language. More specifically, I am interested in the phylogenetic precursors of linguistic communication, to test a multimodal rather than a purely vocal or gestural hypothesis of the origin of language. For that purpose I would like to investigate great apes’ communicative behavior in several contexts (experimental set-up, captivity observation, wildlife observation).</p> <p>During the visit to Jigokudani Yaen Kōen, I had the opportunity to observe wild Japanese macaques, also known as Snow Monkeys, in their natural habitat. The general purpose of this tour was to achieve competences in field work, as for instance “how to properly plan a trip” or “how to properly behave in a monkeys’ environment”. This experience was obviously of great interest for both my current and future research.</p>

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*A Japanese macaque enjoying the Onsen.*



*A baby “Snow Monkey”.*

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*Japanese macaques looking for food.*



## **6. Others**

During my PhD, I studied human primate communication, at Gipsa-Lab (Grenoble University, France).

Since I am a new member of the Primate Research Institute of Kyoto University, and also a novice in this research field, this excursion has been a great opportunity not only to learn about field work, but also to get to know my new co-workers better. It was an ideal opportunity to share professional and personal experiences but also to discover a new side of Japan and its culture, notably by enjoying Soba and the Onsen!

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2014. March, 18	
<b>Affiliation/Position</b>	Wildlife Research Center, Kyoto University / JSPS Post Doctoral Research Fellow
<b>Name</b>	Yumi Yamanashi

<b>1. Country/location of visit</b>
Yamanouchi-machi, Shimotakai-gun, Nagano, Japan
<b>2. Research project</b>
Behavioral observation of wild Japanese macaques in Jigokudani
<b>3. Date (departing from/returning to Japan)</b>
2014.3.10– 2014.3.12 (3 days)
<b>4. Main host researcher and affiliation</b>
Jigokudani monkey park
<b>5. Progress and results of your research/activity</b> (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.
<p>It is important to know how animals live in their wild habitat, when we consider welfare of captive animals. The purpose of this visit is to observe behaviors of Japanese macaques living in Jigokudani monkey park for future improvement of captive environment.</p> <p>I observed their behaviors for 3 days. Although monkeys utilized hot spring every day as people scattered wheat in the hot spring, more monkeys utilized hot spring on snowy day to cope with cold temperature (Photo 1). Their food repertoire includes wheat, bark and Japanese cedar (Photo</p> <div style="display: flex; justify-content: space-between;"> <div style="width: 45%;">  <p style="text-align: center;">Photo 1. Many monkeys used hot spring on snowy day.</p> </div> <div style="width: 45%;"> <p>2). I did not observe monkeys in Yakushima island ate Japanese cedar in spite of abundance of that tree species, as they can eat other types of food. It seemed very tough to survive winter in Jigokudani considering the temperature and limited food resources. However, monkeys could choose and use several strategies to cope with it, which is what is still lacking in captive environment.</p> <p>During daytime, monkeys were surrounded by many tourists, but they seemed they did not care. I did not</p> </div> </div> <div style="margin-top: 20px;">  <p style="text-align: center;">Photo 2: A monkey ate Japanese cedar.</p> </div>

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observe monkeys trying to threaten us and stress-related behaviors due to our presence. I was surprised to know such generosity of the monkeys toward human presence.

I could also observe various social behaviors (Photo 3-a, 3-b).



(Photo 3-a) Mounting behaviors of two juveniles after small fight.



(Photo 3-b) A monkey stood up bipedally and vocalized after small fight.



Photo 4. Monkeys gathered on a tree to eat bark on the way back to mountain.

After the Jigokudani monkey park closed at 16:00, the monkeys moved to mountain side. On the way back, they gathered on the same tree to eat bark (Photo 4). Monkeys used different places for night rest every day as they moved toward different direction each day. It was difficult to find signs of monkeys after their going back to mountain side.


As a whole, it was great opportunity for me to know the life of monkeys living in severe climatic environment. In addition, it was very beneficial to discuss the behaviors of monkeys with other researchers on site to deepen the observation. I would like to apply this experience to promote welfare of captive animals.

## 6. Others

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2014. 03, 17

<b>Affiliation/Position</b>	M2 student, Strasbourg University
<b>Name</b>	Cecile Sarabian

<b>1. Country/location of visit</b>
Yamanouchi-machi, Shimotakai-gun, Nagano, Japan
<b>2. Research project</b>
<b>3. Date (departing from/returning to Japan)</b>
2014.3.10 – 2014.3.12 (3 days)
<b>4. Main host researcher and affiliation</b>
Jigokudani Yaen-koen
<b>5. Progress and results of your research/activity (You can attach extra pages if needed)</b>
Please insert one or more pictures (to be publicly released). Below each picture, please provide a brief description.
<p style="color: red;">This field excursion to Jigokudani was my first trip with PWS. A great opportunity to observe the famous “hotspring monkeys” and their natural environment. It was very interesting to notice the behavioral and morphological differences between the Japanese macaques of Jigokudani and the ones of Koshima (my study subjects).</p>

<b>Jigokudani macaques feeding on the onsen</b>

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Although for both of these populations, water became part of their environment some decades ago, they developed different adaptations to it; Koshima macaques using water to wash food or to catch fish while Jigokudani macaques prefer using water to bath and feed (provisioning occurs partly in the pool). Morphological differences might be due to different climate and provisioning conditions. Jigokudani macaques have a much thicker fur than Koshima macaques at the same season and provisioning occurs several times a day in Jigokudani (versus 2-3 times a week in Koshima). Jigokudani onsen was created in 1964 and since then, the macaques have been habituated to humans. There is only one troop of 160 individuals, which is about 3 times more than the provisioned troop of Koshima.



**Barley is distributed in the pool and in other areas around**

Jigokudani macaques seem pretty easy to study, at least for behavioral/fecal data collection between 9 am to 5 pm, which are the park schedules during which, provisioning occurs. It might certainly get harder in Winter, when the temperature can get down to  $-10^{\circ}\text{C}$ . Although Jigokudani onsen is about 30-minutes walk from the parking lot, I was surprised to see tourists continuously throughout the days. The place around the pool can quickly become busy so, I would recommend to take note of this prior to begin a study at Jigokudani. However, it may fluctuate throughout the seasons.



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For me, this experience was also a human adventure where I could discover other students from PRI and abroad, enjoy their company and, be initiated to the best of the Japanese culture such as *onsen*, *nabe*, Japanese-style breakfast, “tamago-onsen”, etc. Through this experience, I have also seen what the work of organizing such trip was. It is for sure not easy to lead a group of +20 students who all have different ideas and interests in the field. However, the synchrony among the group worked pretty well.



**My vegetarian dishes (except for the crickets)**

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Posing near the pool

Thanks to the organizers and the PWS committee that allowed us to live this wonderful experience.



Time to go back – tired

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Cecile Sarabian

**6. Others**

Here, I am adding some comments to improve future trips: 1) Perhaps, describing a bit of History and some information about the visited field site; 2) Three days were short, but we can think of some very small ideas/projects that each student through his interests can develop in the field; 3) Suggesting the students to assess the conservation status of the population they met.

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2014. 03. 30	
<b>Affiliation/Position</b>	Primate Research Institute / Educational staff
<b>Name</b>	Koshiro WATANUKI

<b>1. Country/location of visit</b>		
Yamanouchi-machi, Shimotakai-gun, Nagano, Japan		
<b>2. Research project</b>		
Observation of Japanese monkey living in snow mountain and their habitat		
<b>3. Date (departing from/returning to Japan)</b>		
2014.3.10 – 2014.3.12 (3 days)		
<b>4. Main host researcher and affiliation</b>		
Jigokudani Yaen-koen		
<b>5. Progress and results of your research/activity</b> (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.		
<p>During this visit, I visited Jigokudani Yaen-koen and observed Japanese monkeys living in snow mountain.</p> <p>This park is very famous and attracting many visitors including foreign tourists.</p> <p>I tried to understand why the park is so popular, by comparison to Japanese zoos.</p> <p>I wanted to get some hints of the future vision of zoos from this visit and observation.</p>		
		
<b>6. Others</b>		

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2014. 03, 28

<b>Affiliation/Position</b>	Chulalongkorn University/M2 student
<b>Name</b>	Srichan Bunlungsup

<b>1. Country/location of visit</b>
Yamanouchi-machi, Shimotakai-gun, Nagano, Japan
<b>2. Research project</b>
Genetic diversity of <i>Macaca mulatta</i> (rhesus macaque) and <i>M. fascicularis</i> (long-tailed macaque) : Mainly focus on their hybridization range
<b>3. Date (departing from/returning to Japan)</b>
2014.3.10 – 2014.3.12 (3 days)
<b>4. Main host researcher and affiliation</b>
Jigokudani Yaen-koen
<b>5. Progress and results of your research/activity</b> (You can attach extra pages if needed)
<p>During I observe that monkeys, in the morning I saw they are mainly eating. They try to find some food on the ground which was covered with snow. (fig.1) Another behavior is, they go to their On-sen, not only for soak but some of them also find some food in the hot spring (fig. 2). In the afternoon, I saw them feel relaxing. After they full, they grooming each other (fig. 3), some of them sleep (fig.4). For Juvenile, they play, jump and look have fun with their friends (fig. 5).</p> <div style="display: flex; justify-content: space-around;"> <div style="text-align: center;">  <p>Figure 1. Monkeys try to find some food from the ground.</p> </div> <div style="text-align: center;">  <p>Figure 2. Monkey finds food in the hot spring</p> </div> </div>
Please insert one or more pictures (to be publicly released). Below each picture, please provide a brief description.

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figure 4. Sleep after have breakfast



figure 3. Grooming behavior



figure 5. Juvenile japanese monkeys play with their friends

This is the first time for me to go to observe Japanese monkeys in the wild. I feel that Japanese macaques are more kindly, not aggressive so much when compare to rhesus and long-tailed macaque from Thailand (my country). Because Jigokudani is attraction point for tourist, many people come here and make macaques in this area are familiar with humans. Moreover, staffs at here feed them every day so they know that if they are come close to human, they will have a chance to get food more than they stay far or stay another place. Therefore many tourists can take a photo very close with monkeys. I feel that this is a good place, human and monkey can stay together, no conflict. People come here to study and see how much Japanese macaque so cute whereas Japanese macaques come here because they know they can get some food. No one get harmful effect from this situation. It's very nice place !!!

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<b>6. Others</b>