

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

2018. 05. 05	
<b>Affiliation/Position</b>	Wildlife Research Center/D3
<b>Name</b>	Nachiketha Sharma

<b>1. Country/location of visit</b>
Kyoto, Japan
<b>2. Research project</b>
Elephant Welfare Event
<b>3. Date (departing from/returning to Japan)</b>
2018. 03. 03 – 2018. 03. 04 (2 days)
<b>4. Main host researcher and affiliation</b>
Dr. Shiro Kohshiyama, Professor, Wildlife Research Center, Kyoto University Dr. Tetsuro Matsuzawa, Professor and Coordinator, PWS, 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>There is a long-lasting debate going on about the welfare of captive animals. Even though issues regarding animal-welfare and their rights are catching much attention only in recent times, issue itself has its own history. The argument for animals having same moral rights as humans was put forth and fought for in the court as early as 15<sup>th</sup> century. Just to quote an interesting case- the 16<sup>th</sup>-century French jurist, Barthélemy de Chasseneuz, made his career by successfully defending a ‘bunch of rats’ who were accused of destroying barley crop. In his defense, he argued that, his clients failed to attend the court proceedings due to the vigilance of their mortal enemies, the cats! Such courtroom cases, however, might not be the sole base for concluding that the animals were as rightful as humans in the previous centuries.</p> <p>It is becoming progressively more clear that animals in captivity undergo stress which may be acute or chronic, ultimately leading to several physiological and behavioral modifications such as stereotypic behavior (performing the same action continuously), getting aggressive, being lethargic, etc. To overcome this adverse effect of captivity, researchers and many animals’ right activists push for the “environment enrichment (EE)” for the captive animals. EE is used as a tool to enhance the quality of living for captive animals by providing various stimuli or set-ups which potentially mimic with their natural habitats and favor their natural, social, sensory and feeding behaviors. However, EE has its own short comings and universal applications are questionable.</p> <p>Here, the fundamental question is whether wild animals should be kept in captivity? If so, which animals and for what purpose? There are several schools of thoughts to answer the above questions. Many argue, zoos play a vital role in education and conservation of animals also help to maintain gene pool in case of rare and critically endangered animals. However, the counter-argument is, what about the rights of those animals which are displayed for public by prohibiting all their natural and social instincts and restricting them to a completely artificial setting?</p> <p>To address some of the above questions in relation to the ‘elephant welfare in captivity’, there was a two-day event organized by PWS. The session was divided into two parts.</p>

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

**March 03, 2018**

**Screening of Gods in Shackles**

“Gods in Shackles” is an award-winning documentary, directed by Sangeeta Iyer, showcasing the plight of temple elephants in Kerala, a southern state of India. It exposes the repugnant torture given to India’s heritage animal in the name of culture. The film aims to offer help to thousands of captive elephants in India and around the world, by creating awareness that will inspire key stakeholders, policy makers and the public to enhance the living standards of highly social animals in captivity.

**Dr Jane Goodall on the film:**

"I feel sickened and terribly saddened that elephants are treated in this way in the name of religion. Mahatma Gandhi said that you can judge a nation by the way it treats its animals. I am sure this film shot with infinite compassion will shock all who watch and motivate many to do all in their power to bring this torture of sentient sapient beings to an end."

The screening was followed by a brief discussion with Prof. Raman Sukumar, a pioneer researcher in the ecology and management of Asian elephants, who gave us a broader picture of how elephants are being used in cultural ceremonies over several generations. It was clear that, government and forest department are not so much bothered about the torture given to elephants during religious ceremonies, and there is a need of an immediate intervention from the policy makers, public and all sections of the society to stop the abuse of elephants.

**March 04, 2018**

On the second day, we had a panel discussion on ‘elephant welfare in Japan and around the world’.

In the panel, we had five eminent researchers to discuss about the elephant welfare issue in India and Japan, in general.

The session was chaired and moderated by Prof Shiro Kohshima.

Three panelists made oral presentations. They are-

**a. Four pillars of elephant welfare- Prof Raman Sukumar**

Prof. Sukumar states in one of his book chapter- “The relationship between Asian elephants and people is arguably the most contrasting and complex interaction between any animal and human through history. The elephant is a creature that has been tamed yet never really domesticated, that has carried our heaviest burdens, yet has also been a huge burden to farmers whose crops it has ravaged. It has been a participant in Asia’s fiercest battles for over two millennia, yet it has also played the role of an ambassador of peace. Elevated to the status of a supreme god, the elephant has also been kept in chains and brutally slaughtered for its ivory. It is then not an easy task to fully comprehend the legacy of *Elephas maximus*, one of the planet’s most intelligent and charismatic denizens”

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

Prof. Sukumar explained the four pillars of the elephant welfare as follows:

1. *Capturing elephants-*

Earlier elephants were captured for several reasons such as timber work, tourism, etc. After the 1972 Wildlife Protection Act, capturing of elephants for work has been stopped in India. However, now and then elephants are being captured which are involved in conflicts with people. Altogether there are 13000 captive Asian elephants throughout the Asia, in which 3500 captive elephants are in India.

2. *Training elephants-*

Once the elephants are captured, elephants are trained based on the region they are being captured which may include different traditions. For instance, North-East Indian method (Aryan-Dravidian way), Thai tradition (ten separate ways), Southern Indian method which includes pits (Dravidian way) and in one of the southern states of India-Tamil Nadu, people just use ‘a stick’ to train an elephant. Recently, several elephant trainers have been using ‘positive reinforcement method’ which contradicts the previously mentioned traditional training methods.

3. *Elephant husbandry-*

Elephant husbandry focused on the housing, nutrition, health care, daily routine, etc., provided to captive elephants. The fodder which we provide should be their natural diet. More importantly, elephants should be kept in a social group rather than just keeping them solitary, the former would enhance their quality of life to some extent in captivity.

4. *Use of elephants-*

Elephants are used in circuses. Ringling Brothers Circus forms one such example where they use elephants to perform. Elephants are extensively used in Thailand for tourism. While in India, especially in southern states, elephants are being used as the mascots for religious ceremonies, leading to the rise of ‘cultural tourism’.

The talk covered historical prospectives to current scenarios in captive elephant welfare and management.

To know more about Prof Sukumar’s work, following link can be accessed

<https://rsukumar.weebly.com/>

**b. Life in captivity and wild- Dr Keith Lindsay**

Elephants are highly social animals. They live in a basic family unit of mothers and their calves which extends to a family unit of sisters, their calves and aunts. Sometimes, several family units come together to form a bond group and several bond groups to form clans. This allows them to interact and engage in social activities in a day to day life. When families meet, they indulge in social interactions such as vocal greetings, play, etc. They are even known to grieve or mourn over the death of their conspecifics (by touching the mortal remains such as bones, showing gestural rituals, etc). Beside being social, they travel over large distance in search of food and water exploring the forests. Elephants are

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

known to feed on hundreds of graze and browse-species. The oldest elephant, the matriarch is known to have repository of knowledge on which plant to eat on what season, how to find the water source in dry seasons and so on. On the contrary, elephants in captivity are deprived of above mentioned natural amenities and freedom. That is, they are confined to a small area, most often without companions and feeding on unnatural fodder. This would ascertain various physiological and psychological costs on the elephants.

Dr. Lindsay explains the pros and cons of maintaining elephants in zoos:

He stated: “Zoos in all parts of the world, and their national and international associations, are increasingly recognizing that it is best practice to satisfy, as much as possible, the needs dictated by the biology of the wild animals they keep. Providing satisfactory conditions allow animals to maintain physical and psychological health, and to express their natural behavior. Similarly, captive elephants should be given an adequate approximation of their normal, wild habitat: space, substrates and facilities that allow them to exercise their feet and legs, and to make their own decisions about feeding and drinking, or forming social groupings. Guidelines developed by zoo associations and elephant sanctuaries in different countries have attempted to set high standards requiring considerable investment of resources, although there remains a need for continued improvement. A number of zoos, including within Japan, have seen that their available space and funds are not sufficient to support the very large commitment needed for elephant well-being, and they have taken the positive decision to close their elephant exhibits”.

Dr Lindsay during his talk, further highlighted his recent report on ‘**solitary elephants in Japan**’ which explained the standard and quality of life of elephants in Japan. A survey was conducted in the 14 different zoos across Japan to access the quality and facilities provided for the captive elephants. According to Japanese Association for Zoos and Aquariums (JAZA), there were 111 elephants in Japan, out of which 74 are Asian elephants (in 35 zoos) and 37 African elephants (16 zoos) as of 2010. He could visit 14 out of seventeen zoos where elephants are kept solitary. He mentioned the zoos in Japan can be categorized in three ways: a) substandard- where elephants are kept solitary, alone and confined to a small place, b) moderate standard- where elephants are living fairly well-managed artificial ecosystem, and c) improving- where zoos are making efforts to provide enrichments for the elephants which they display in public. He observed that most of the elephants showed stereotypical behaviors which occurs due to chronic stress and severe boredom.

At the end of the report, he provided recommendations for the welfare and management of elephants in Japan as short, mid and long-term goals which are briefly discussed in the later part of his report.

A detailed report can be accessed at this link-

<http://elephantsinjapan.com/solitary-elephants-in-japan-report/>

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

**c. Current practice and future direction of elephants in Kyoto city zoo- Dr Yumi Yamanashi**

Dr Yumi, is a principal researcher, Center for Research and Education of Wildlife, Kyoto City Zoo and also a specially appointed researcher at the Wildlife Research Center, Kyoto University. She explained the history, current projects and enrichment initiatives undertaken in the Kyoto City Zoo to enhance the living conditions of the elephants at the zoo.

The elephant breeding project was initiated on the occasion of the 110<sup>th</sup> year anniversary of Kyoto city zoo (2013) and 60<sup>th</sup> year (2015) anniversary of the diplomatic establishment with Japan and Laos PDR, by gifting four elephants to the Kyoto City Zoo. The main objective of this project is to aid in ‘in-situ conservation’ of endangered Asian elephants. The PI of the project is Dr. Masayuki Tanaka.

Before the arrival of the new elephants, the zoo had a single old female elephant named Mito. After her partner died, she is been solitary since a long period of time. When she was moved to a new enclosure, it was hard for her to adjust and she refused to come out of her enclosure. Elephant trainers in the zoo never gave up and tried several ways to make her accept her new home. They used one of most indigenous ways, i.e., to attract elephants by providing food. They planted potato plants, just outside her enclosure. After several attempts, almost after two years, Mito finally started using her out-door enclosure.

Apart from the above success story, the Kyoto City Zoo has also made attempts by providing natural settings to the elephants by allowing social interactions both outdoors and indoors, integrating a new group of elephants with Mito, (which is partially successful and hopefully condition will continue to improve over the course of time), and providing enrichments by mimicking natural settings, water pools, etc. Regular health check-up, introducing the positive reinforcement training methods are some of the plus-points which separate the Kyoto city zoo from other zoos.

More information about Dr Yumi Yamanashi’s work can be accessed here-

<https://www.wrc.kyoto-u.ac.jp/en/members/yamanashiY.html>

Information on Dr Masayuki Tanaka’s work can be accessed here-

<https://www.wrc.kyoto-u.ac.jp/en/members/tanaka.html>

During the panel discussion, Prof. Tetsuro Matsuzawa made a brief and effective presentation. In which, he mentioned about the initiatives which they used to monitor the health and welfare of Great apes in Japan. One of the initiatives is a database set-up to provide the information of all Hominoidea under on the banner called ‘**GAIN- Great Ape Information Network**’. The network also provides opportunity to researchers to collaborate with various institutions who share the common interest of conserving the great apes.

More information on GAIN can be accessed here-

<https://shigen.nig.ac.jp/gain/>

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

Prof. Matsuzawa also urged elephant experts to come together to form similar database, where the information on each captive elephants’ in Japan and around the world can be brought under one roof for better monitoring and welfare of captive elephants. This would provide an opportunity for exchanging, sharing of knowledge and new research opportunities for various institutions to collaborate for conserving elephants.

**Recommendations**

Based on the valuable outcomes of this screening and panel-discussions, we take an opportunity to propose a few recommendations:

1. Similar to the GAIN initiative, elephant experts must come together to form the common data sharing network on captive elephants. For instance, it could be the ‘Captive Elephant Network and Management (CENM)’.
2. All elephant experts, conservationists, researchers, veterinarian and elephant handlers in Japan should meet often to discuss about the welfare and management of elephants. This would provide an opportunity to enhance the status of captive elephants.
3. Goal-oriented recommendations:
  - a. Short-term goals: Zoos which have a single elephant exhibit should consider closing or transferring elephants to larger zoos where they can socialize with other elephants. The positive side of such decision taken should be explicitly explained to the public to create more awareness on the elephant welfare.
  - b. Mid-term goals: Measures should be taken to increase the enclosure size. Time given for out-door activities should be extended considerably and attempts should be made to keep elephant active as much as possible to enhance their feeding behavior.
  - c. Long-term goals: Different zoos across Japan should come together to establish the elephant sanctuaries at specified locations which could cover three-four major cities where elephants can live free, in a group in a natural environment, where public can take pleasure in observing, hearing and learning about their natural habitats, ecology and behaviors.
4. Capacity building should be given more importance, especially by training veterinarians to access the health conditions of captive elephants.
5. Public awareness programs which ‘glorify elephants’ should be conducted more often to raise awareness among school kids, college students, government officials and public.

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



Prof Raman Sukumar in discussion with with audience after the screening of ‘Gods in Shackles’



From left: Prof Shiro Kohshima, Prof Tetsuro Matsuzawa, Dr Keith Lindsay, Prof Raman Sukumar and Dr Yumi Yamanashi in panel discussion

## 6. Others

Sincere gratitude to Prof Shiro Kohshima for encouraging us to conduct the session and to PWS for hosting the entire event. Special thanks to Mr. Duncan Wilson has worked tirelessly in organizing the event, without him, the event would not have been possible. Many thanks to Sakai-san, Miku for all the assistance before and during the session and Sofia Budai for making a wonderful poster.