

**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.)

2014.06.12	
<b>Affiliation/Position</b>	Centre for Ecological Sciences, Indian Institute of Science / PhD Student
<b>Name</b>	Vani Dahiya

<b>1. Country/location of visit</b>
Japan/ Yakushima Island
<b>2. Research project</b>
Training course on understanding diets of small mammals in Yakushima
<b>3. Date (departing from/returning to Japan)</b>
2014. 05. 19 – 2014. 05. 24 (6 days)
<b>4. Main host researcher and affiliation</b>
ISSO Field Station, Yakushima Island, Wildlife Research Centre, Kyoto University
<b>5. Progress and results of your research/activity</b>
<p>During this training course we conducted field work in Yakushima Island to understand the diets of Yakushika (the Yakushima deer) as well as other small mammals (raccoon dogs, weasels and monkeys). The primary species for our study was the Yakushika. We tried to determine its diet by three methods. Firstly through direct observation. Secondly by collecting whole fecal samples (stored in ziplock bags) for dry analysis and finally by collecting fecal samples from the core of fresh feces (stored in RNA later) for metagenome analysis using the Next generation Sequencer. Fecal samples were also collected for other small mammals, however direct observations of feeding behaviour were not made. Fecal samples were collected from different altitudes to determine altitudinal differences in diet composition. Post field work, fecal samples were sorted and processed for dry analyses. Using the microscope, many plant parts, especially seeds, insects and other food particles were identified from the dried fecal samples. Towards the end of each day all teams discussed their progress and received valuable suggestions from the instructors and students. Additionally we got the opportunity to attend bat survey on one night (and interacted with Dr. David Hill) and also observe the nesting of a leather-back sea turtle on another. The training course ended with presentations from all the teams. Yakushima field training course was an excellent opportunity to experience several aspects of field work – designing the study, observation of feeding behaviour, sample collection, sample processing and data analysis.</p>

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Fig 1. A Yakushika feeding in the highlands of Hananoego



Fig 2. Feces of Yakushika



Fig 3. Dried fecal sample of Tanuki



Fig 4. Diet identification from dried fecal samples



Fig 5. Babarinoki seed observed under microscope in Deer feces



Fig 6. Food parts identified from raccoon dog feces

**6. Others**

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