

**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.)

	2016. 07. 06
<b>Affiliation/Position</b>	Primate Research Institute/D2
<b>Name</b>	Duncan Wilson

<b>1. Country/location of visit</b>
Rausu, Shiretoko National Park, Hokkaido, Japan
<b>2. Research project</b>
Killer Whale Field Research
<b>3. Date (departing from/returning to Japan)</b>
2016. 06. 29 - 2016. 07. 04 (6 days)
<b>4. Main host researcher and affiliation</b>
Dr. Yukiko Yamamoto (Wildlife Research Center, 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>During this field research trip we accompanied researchers from Kyoto University on a sightseeing boat to learn about the killer whale research they are conducting in the Shiretoko/Nemuro Channel, Japan. Every day we departed at 5:00 and returned at 16:00 (11 hours at sea). Although we mainly encountered killer whales (up to 100 individuals a day!) other whales and dolphins in the area include; sperm whales, minke whales, Baird’s beaked whales, pacific white-sided dolphins, Dall’s porpoises, and harbour porpoises.</p> <p>In Japan, killer whales range from Okinawa in the south, to Hokkaido in the north. I was surprised to learn that the killer whale density in Shiretoko is higher than that in Canada or Alaska. In the past, local fishermen have largely ignored their presence. However, recently they have started to provide sightseeing tours to observe them, which has benefited the local economy. Research on the killer whales only started in 2010, and there is still much to be discovered about their characteristics and behaviour, and the effects of tourism on the population at large. Current ongoing research projects include; comparing the genetic relationship and vocalisations with a Russian killer whale group nearby, investigating the relationship between behaviour and vocalisations, and how they behave around and interact with sightseeing boats.</p> <p>The main activities we took part in were photography for identification, listening to underwater vocalisations (calls, whistles and clicks) using a hydrophone, and observation of behavior. We were very fortunate to observe many different types of surfacing behaviour, including; <i>spy-hopping</i> (Page 2) - raising the head vertically above the water, at least above eye level, and then slipping back below the water's surface, <i>inverted tail-lobbing</i> (Page 2) - lying on the back, raising the tail flukes above the water's surface and bringing them down with force, <i>half-breaching</i> (Page 4) - leaping out of the water, exposing half of the body and landing on the side, <i>logging</i> (Page 5) - resting at the water surface and exposing the melon (rounded region of the forehead), upper back, and part of the dorsal fin for a period of at least 10 seconds, <i>pectoral slapping</i> (Page 5) - lying on the side, lifting a pectoral flipper, and slapping it on the water's surface with force, and <i>inverted pectoral slapping</i> (Page 5) - lying on the back, raising the pectoral flippers straight up and slapping the dorsal surfaces down on the water's surface. I was very impressed with how gracefully they moved through the water, and the complexity of their behaviours, although their precise function is not yet fully understood.</p> <p>Overall, this trip was a wonderful and rare opportunity to learn about the marine ecosystem in Shiretoko, marine mammal research methods, and the current challenges of coexistence between people and wild killer whales. In particular, I am looking forward to learning about how the sightseeing boats affect their behaviour, for better or worse. I am sincerely grateful to Dr. Yamamoto for her helpful explanation, and Prof. Tetsuro Matsuzawa (PWS Coordinator) for financially supporting this special trip.</p>
<b>6. Others: Photographs</b>

**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.)*



Spy-hopping

Inverted tail-lobbing



**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.)*



**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.)*



Half-breaching



**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.)*



Logging



Pectoral slapping



Pectoral slapping



Inverted pectoral slapping



Inverted pectoral slapping

**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.)



Dr. Yamamoto explaining the hydrophone



Our boat the 'Hamasasu'



Rausu souvenir shop decorated with killer whales



Whales and dolphins of Shiretoko/Nemuro Strait