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.)

| | 2017. 10. 02 |
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| Affiliation/Position | Wildlife Research Center/D3 |
| Name | Kasumi Sakakibara |

1. Country/location of visit

Japan, Fukuoka, Marine world, Uminonakamichi

2. Research project

Measurement of the body surface spectrum in Finless porpoise, Neophocaena spp.

3. Date (departing from/returning to Japan)

2017. 09. 21 (1 day)

4. Main host researcher and affiliation

Mr. Keisuke Kondo and Mr. Hiroyasu Makino, Marine world, Uminonakamichi

Prof. Naruki Morimura, WRC and KS, Kyoto University

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.

We measured the body surface spectrum of 3 individuals in Finless porpoise (sunameri) using two Multispectral cameras. Finless porpoises (*Neophocaena spp.*) have no dorsal fins and no remarkable features on body surface distinguishable by human vision, so it is very hard to identify the individuals in wild Finless porpoises. Therefore, we have almost no report on their social structure based on the long term monitoring of identified individuals. In the Misumi western port in Kumamoto, we can often observe groups of this porpoise including 10 - 63 individuals. At present, we are studying these wild sunameris focusing on their seasonal habitat use and group behavior. This time, we measured the body surface spectrum of captive sunameris to establish the identification method of the wild sunameri by visual observation. The surface spectrum of sunameris is important to detect the pigment pattern on the body surface that can not seen by human vision, a possible marker for individual identification.

We conducted this measurement during their monthly medical check when we can quickly deal with the possible ill effects of the measurement to the animals. We conducted the measurement very carefully and made efforts to decrease the load of animals. We safely measured their body surface spectrum for about 5min. per individual, 20 min. in total. In the preliminary analysis, we could not find remarkable difference in the surface spectrum useful for identification. We will continue analysis to clarify sunameri's characteristics in the body surface spectrum. In 14th October, we will make a presentation about the result of this study.



Rehearsal of scanning the body surface spectrum using by dolphin figure.

Submit to : report@wildlife-science.org

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6. Others

I really appreciate for their kindness and doing this study with us, to Mr. Keisuke KONDO, Mr. Kaoru FUJIMARU and Mr. Hiroyasu MAKINO in Marine world. Also thanks to the keepers of Finless porpoises. Moreover, Mr. Shiori ANDO and Mr. Takahiro FUJIMORI gave the technique to measure the spectrum using by two Multispectral cameras.