	2019. 06, 04
Affiliation/Positio	Wildlife Research Center/M1
Name	Scott Jenkins

1. Country/location of visit

Yakushima, Japan

2. Research project

Species interaction in Yakushima Plants

3. Date (departing from/returning to Japan)

2019. 05. 25 – 2019. 05. 31 (7 days)

4. Main host researcher and affiliation

Professor Hirokazu Toju, Center for Ecological Research, 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.

At the end of May, I traveled to Yakushima to take part in the Yakushima Field Course. This was my first time visiting Yakushima, and I was looking forward to learning a lot as part of the Species Interaction Group. On our way to the field site, we came across some Yakushima macaques and Yakushima deer. I had recently studied Japanese macaques on my trip to Koshima, so it was interesting to see a subspecies. I noticed that Yakushima macaques were much fluffier. It was also interesting to see baby macaques, since the Koshima trip occurred before babies are generally born.

The species interaction group gathered plant samples from two sites: one about an hour away from the PWS house, and another very close to it. Once my group found a field site, we each chose a plant species to gather samples of. I chose *Oenothera laciniata*, a small plant with yellow flowers. I thought it was interesting that the plant was able to grow even in sand. When I dug up the plant, I realized that this was because *O. laciniata* has a very long central root that extends horizontally underground. Unfortunately, this root made gathering plant samples much more difficult. Later I found out that *O. laciniata* is actually native to the eastern United States. It's ability to grow in sand probably made it easier for it to spread to new environments. Researching the other plants we gathered revealed that including *O. laciniata*, 3 of the 6 species came from America. It was interesting to see how western flora had managed to spread to a relatively isolated island.

Once we finished gathering plants we took root samples from each plant and put them on agar plates. After 2 days, we compared the organisms growing on each root to categorize them based on appearance. *O. laciniata* had a lot of statistically significant relationships with different symbionts. This could be due to its origins or to the sandy substrate it grows in. We also found a significant relationship with one of the fungi

we hiked to an isolated forest to take soil samples. Interestingly, I found a shard of a ceramic cup on the ground. Professor Koju suggested it could have been dropped there back when the logging industry on Yakushima was still going strong. One definite artifact of the logging that occurred was the number of trees growing of the stumps of trees cut down during logging. Apparently there are even rare trees growing from the stumps of trees growing from the stumps of even older trees. It was fascinating to see the results of logging that occurred over centuries. Also, the trees on Yakushima have high resin levels, so the wood in the stumps left behind is still usable. Wood left over from logging is now used by Yakushima artisans to make various items.

During the trip, we stayed at the PWS house, which was very comfortable. We ate food made by a local cook for breakfast and dinner. The beach near the PWS house is known for the large number of turtles that come to lay their eggs there. I was hopeful that I would be able to see some turtles at night, but the moon wasn't visible until late at night, and using lights on the beach at night is prohibited to confusing turtles. Some other students were able to watch a turtle that came to lay its eggs during the day.

Overall the trip to Yakushima was very interesting and informative. I hope to return there someday.

*Please have your mentor check your report before submitting it to [report@wildlife-science.org].

6. Others

Figure 1 A baby monkey scrambling



Figure 2 Yakushima Macaques lounge on a road



Figure 3 A tree growing from the trunk of a tree that was cut down

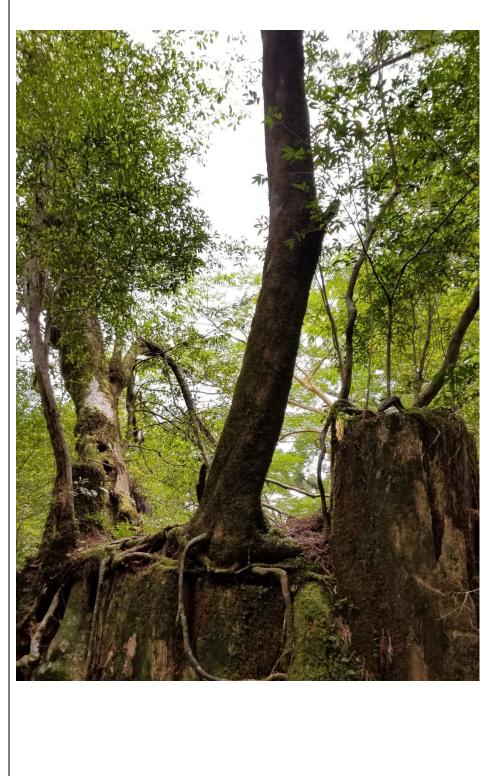


Figure 4 My plant, Oenothera laciniata

