REPORT ON EXPEDITION/PROJECT/CONFERENCE

Expedition/Project/ Conference Title:	Biodiversity monitoring and wild life maintenance in Pacaya Samiria National Reserve, the Amazon, Peru
Travel Dates:	12.06.15 – 13.07.15
Location:	Pacaya Samiria National Reserve, the Amazon, Peru Aleksandra Eremina (research assistant)
Group member(s):	
Aims:	Long-term data collection for monitoring climate change influences on biodiversity of Pacaya Samiria region

OUTCOME (not less than 300 words):-

Pacaya Samiria National Reserve is the 2nd largest National Reserve in Peru, its territory is roughly equal to the size of Wales (20,000 km²). After it became a National Reserve and, thus, a highly protected area, in 1972, many wildlife conservation projects were established there. Operation Wallacea (OpWall) and several other NGOs are nowadays participating in the long-term data collection for biodiversity monitoring in the Reserve. The data obtained, using consistent methodology for the last 25 years, allows tracing the influences of climate changes on wildlife content of the area.



One of the beautiful inhabitants of the tropical rainforest

I have participated in the OpWall expedition to Peru in the first half of the season-2015. In the very beginning, all research assistants, which I was one of the representatives of, had 2 weeks of rotations, which gave us opportunities to have a taste of all the surveys conducted on the site. At that time, due to extremely flooded conditions of the forest (a very high level of water in 2015), we were mostly working in the boats, doing only aquatic and not terrestrial transects. For the last 2 weeks we specialized in the projects we enjoyed mostly, however, there were no restrictions on continuing working a little bit on everything.

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I and one of the baby caimans we measured. This is the smallest of all 3 species in the region, a dwarf caiman.

In my case, I very much liked all the Nature around me together and not only its particular parts. Therefore, I tried to make my days as diverse as possible. In the mornings I was usually going out to mammalian transects, counting primates, sloths, rodents and other groups of mammals present in the jungles. We recorded distance on the transect and coordinates of the point of first seeing, perpendicular distance from our path/ water to animal(s), time and group size. Spending 4 hours of early morning in the forest was amazing: we could see how different its inhabitants are during just one survey. It was especially clearly seen on the lucky days when we met all the major groups of monkeys during one morning: squirrel monkeys, brown capuchins, saddleback tamarins, howlers, saki monkeys and wooly monkeys - I had this full set for several times. My day-time survey was either a land-based transect or wading birds monitoring. The same methodology of recording birds was used; we also recorded their type of behavior (flying/perching). During this month I learned to distinguish birds depending on their size and coloration (used for king fishers' family), vocalization (macaws) and wings movement (for distinguishing between great egrets and cocoa herons on the big distance). These days in the boat gave me such 'gifts' to observe as jabiru – a giant and gorgeous stork with wings' length of more than 2.5 m, zigzag and boat-billed herons and many more.



Jabiru flied 3 meters above our boat on the last day of the surveys

Finally, every night I participated in the nocturnal terrestrial amphibian survey: we were using torches to search for frogs, toads and salamanders on the distance of 500m, and careful enough observations were lasting up to 4 hours. I learned to visually identify main tree frog species of the region, distinguish geckos from lizards and observed several species of salamanders. Spending nights in the jungles enabled me to observe nature in a very different way, and also gave me a chance to see and hear many interesting insects and even night monkeys. Moreover, the most impressive creature I have ever seen also was

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found on one of the night transects. This was *Leptodactylus pentadactylus*, a giant frog weighting approximately 800g-1kg! Probably, I was not expecting to see such a big one after spending 3 weeks on working with floating vegetation inhabitants, which weight only up to 2g.



L.pentadactylus, a giant frog



One of the very rare species of the region. It was previously found more than 3 years ago.

I would like to thank James Rennie Bequest fund and all the other university scholarships for giving me an opportunity to experience such a new side of the world as 'selva', the Peruvian jungles. This expedition actually was a great mix of cultural and field work experience. Even though I am planning to specialize in biochemistry, from now on I am also extremely interested in linking it to jungle ecology. I am now searching for such projects combining 'lab' and 'field' for my next summer internship.

