

JAMES RENNIE BEQUEST

REPORT ON EXPEDITION / PROJECT / CONFERENCE

Expedition/Project/Conference Title:	Mixed (ecological/rehabilitation) Internship with Hoja Nueva
Travel Dates:	25 th May 2026 – 18 th June 2026
Location:	Hoja Nueva Research Centre, Las Piedras river, Madre de Dios, Peru
Group member(s):	Heidi Holt
Aims:	To gain hands of experience of project fieldwork and to learn a basis of how sanctuary and rehabilitation centres operate.
Photography consent form attached: (please refer to your award letter)	☒ Yes ☐ No

OUTCOME (a minimum of 500 words):-

Acknowledgements:

Thanks to this incredibly generous funding I was able to complete a three week mixed internship in the Madre de Dios region of the Peruvian Amazon jungle with Hoja Nueva. This experience has forever changed my life, not only do I now have better understanding of how field work and research projects take place outside of the education setting, but I have learned so much about myself and grown as a person. All of the challenges I have overcome has proved to me how capable I am.

The Internship:

The activities that took place combined ecological field work and work experience in the rescue centre. For the ecology side of the internship, we took part in activities such as species monitoring, forest inventory, camera trap set up and collection and GPS training.

Species Monitoring:

The species monitoring included walks twice a week, in the early morning, to monitor the monkey species in the surrounding areas. The species' commonly seen included spider monkeys, squirrel monkeys, capuchin monkeys, and howler monkeys. We would alternate the trails used and walk for ~1.5 hours and then turn back. As we walked, we were quiet and noted any monkey sightings. We had to record abundance of individuals, sex, and life stage (infant/juvenile/adult). Included in these walks we also noted any other interesting species that we found (Figure 1). Other species monitoring that we did was night monitoring. To do this, we used a thermal monocular to spot nocturnal mammals. One person would climb the tower (~15m) on sight and for 2 hours, do a 360° scan every 10 minutes. This took place from 6pm → 4.30am. The footage was analysed the next day, and species were identified and inputted into a database. Commonly seen species were night monkeys, rodents and occasionally a sloth. Additionally, as more of a fun activity but to also learn how to identify various insects, we set up light traps twice a week in different spots along the river. This was done by hanging up a large sheet and pointing a light at it so it



Figure 1: This was an extremely rare sighting of a juvenile harpy eagle only 5 meters away from where we were standing. Observed while on a monkey monitoring hike.

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became very bright. This attracts all sorts of insects and after it was left for an hour we returned and had a look and tried to identify what we attracted (Figure 2). Finally, as another form of species' monitoring, we went on a night boat ride and caught caimans. There is a database that has been started to try and follow the caiman distribution in the area along the Las Piedras River. In order to do this, they employed a mark and recapture methodology. They would catch a caiman, scan to see if an ID chip had been implanted yet. If the caiman had not been chipped previously, they would insert a chip into the right side of the tail and add the individual to the database along with body measurements and information of sex, age, weather conditions etc. if the caiman already had a chip, they would record updated length measurements and note the location it was recaptured and release. (Figure 3).



Figure 2: Taken when conducting a light trap, this moth had ~15cm wingspan. This image was taken to ID the moth.



Figure 3: Taken while on a mark and recapture demonstration that was used to survey the local caiman population.

Forest Inventory:

The aim of the forest inventory was to determine an average biomass of standing wood in the forest. This was calculated by setting up a 20mx50m transect and measuring all of the trees with a diameter >10cm. The diameters were all recorded along with a height estimation. Within this large transect, two smaller 5mx5m transects were placed at the SW and NE corners. In these areas we measured the diameter and ~height of all the trees with diameters of 2cm-10cm. These measurements provided enough information to calculate the DBH and give us a rough idea of the state of the forest.

Camera Trapping:

When learning about the camera traps, one of the intern coordinators gave a presentation about their study on an Andean deer species in which they used camera traps as a main source of data, so we altered the methodology and made it suitable for capturing images of forest deer. We went out with 4 camera traps and set each one up near trails as the deer are known to utilise them for efficient mobility compared to attempting to move through primary rainforest. However, when placing the cameras we also had to reduce the chances of also capturing unwanted images of humans as this takes up much needed storage on the camera so they were placed near the trails but slightly off the main walkways. Each trap was placed in different spots, for example, one was near a river, one was very open, one near a potential food source etc. This activity was very interesting as we got to see exactly how to set up camera traps and why we do so in such a way. Because camera trapping is such a useful tool in many areas of research, I'm glad I have this experience to take with me in the future.

In order to carry out all of these activities, you need to know your surroundings. We were taught to use the GPS and be able to calibrate, follow and input interesting sights to aid the exploration of the rainforest (Figure 4). For activities like the camera trapping, the camera's locations were all inputted into the GPS database in order to retrieve them with ease.



Figure 4: Image of an intern using the GPS taken while on an exploratory hike to find an indigenous, endangered tree

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The Rescue Centre:

The rescue centre portion of the internship included many activities that aided the smooth running of the centre. We were allowed contact with the rescue animals that were unable to be rewilded due to various reasons, for example, there was an ocelot that was brought up as a pet and now her temperament was too docile for her to survive on her own, there was a puma that had been declawed by the pet trade and more animals in similar situations to these. As these animals had already been let down by humans it felt really rewarding to be a part of making their lives more enjoyable and enriched. We used natural materials to provide enrichment activities for them all such as using vines to create large mesh balls that could then have food put inside so they had to hunt and work for their meals. This is beneficial for them as it keeps them busy and trains the areas of their behaviour that would usually be in constant use in the wild. At the time I was there, there was one puma (Figure 5), an ocelot, a pompous cat, four coatis, a black caiman, and six tortoises. I am so grateful to have had the opportunity to see and work with these animals.



Figure 5: An image of the puma in the rescue centre, unable to be rewilded due to being declawed.

Conclusion:

Not only did I learn so much about the tropical rainforest ecosystem, I also feel like this three week experience completely changed my life. The challenges of sleeping outside, constant physical exertion and the remote environment have proven to me that I am far more capable than I first thought when going into this internship. I have left this experience a wiser, more mature and more confident individual and these are the traits that I will continue to grow as I explore my biological career. I cannot emphasise enough how much this experience has benefited me, not only as a biologist, but as a woman.