

Affiliation/Position	Primate Research Institute/D1/L3
Name	Josue Alejandro Pastrana

1. Country/location of visit	
Montaria and Lisbon, Portugal/ Aarhus, Denmark	
2. Research project	
PWS Feral Horse Course Behaviour Conference in Lisbon, Portugal / ISAE Conference at Aarhus, Denmark	
3. Date (departing from/returning to Japan)	
2017. 07. 25 - 2017. 08. 12 (17 days) Nagoya-Portugal-Denmark-Nagoya	
4. Main host researcher and affiliation	
Dr Mendonça, Primate Research Institute, Mr. Inoue Sota, Wildlife Research Center, M2/L2	
5. Progress and results of your research/activity	
 <p>As part of PWS student led course, we had the opportunity to visit one of the newest field sites of Kyoto University in the north of Portugal, in the area of Montaría in the mountain range where feral horses roam freely in the area. During the field course we were able to learn how ongoing research using multiple drones to study free roaming feral horses to understand their behavior, moving patterns, and how this technology can be used to understand distance between individuals, related and unrelated, as well as between different social groups. The Garrano horse, (<i>Equus ferus caballus</i>) is a pony of the Iberian horse family, an endangered breed of horse from northern Portugal, mainly used as a pack horse, for riding, and for light farm work. An ancient breed, the Garrano has remained largely unchanged for thousands of years but is in decline due to predation and loss of interest in breeding for agricultural use. The potential for the decline of this population might be due to various reasons, such as the protection of the local wolf species which has increased since his protection, local wild fires that spread through the country, as well as illegal hunt of these animals for horse meat or entertainment purposes.</p>  <p>During our field course we stayed in a very small village, next to the town center's plaza which has the only cafeteria, church, and a small park. The town was very beautiful, nestled in between the mountains with small brick houses and red tiled roofs, close to the top of the mountain where we observed the horses every day from morning until the afternoon every day.</p> <p>When we arrived at the field site, we studied the various groups, and tried to learn how to differentiate between all the groups and individuals. When we trained how to follow and identify the horses, we also used the drones to take aerial videos and pictures simultaneously between individuals and between groups when they encountered each other. This activity was a great learning experience for me as I</p>	



With colleagues in Portugal

would like to use such technology in the future of my study with primates. We were also guided by another researcher from Kobe University who is also studying the relationships between certain individuals, such as infant-mother relationships, by taking long term behavioral data. After our week course learning how to use drones and how to study horses in this northern part of Portugal, we went to the north eastern part of the country to visit a National Forest of Peneda-Gerés, for a day trip to observe the fauna and flora, visit a large natural waterfall formation while riding Garrano horses through the old towns, country roads, and even mountain peaks. It was my first experience horse riding and it was spectacular. Though I must admit horse riding is not as easy as it may seem, and one needs to have full control of horses, it was still a great experience to see the beauty of the local landscape and to understand how this species was of great importance for the locals for transportation and for agricultural work since from many centuries ago.

When we finished our time in the north we all headed to Estoril, 30min by train west of Lisbon, to assist and give presentations of our research at the Behaviour 2017 conference. It was a great



At Behaviour Conference

opportunity to talk about my research with other students and professors, network with other researchers that are interested in animal behavior, and to see similar talks and studies but on other species such as reptiles, felines, carnivores, etc. During our time at the conference we also shared a few lunches and dinners with students from the Max Planck Institute for Evolutionary Anthropology and the German Primate Center. It was a great place to have a conference since we could visit the old city of Lisbon, go to the beach, the national park and castles close to our hotel.

During the summer, daylight is still in Portugal past 9 in the evening, so we had many opportunities to visit places after we finished our conference talks and presentations in the afternoon.

Once the conference was over, I went to another conference in Aarhus Denmark, the International Society of Animal Ethology. It was a very exciting experience for me as the conference was mainly geared to applied research into the improvements in animal care, more enriched enclosures, animal welfare, animal behavior, which are more specific topics I am interested in. In this second conference I gave a different presentation on self-directed behaviors and hormonal profiles in Japanese macaques.



Aarhus Denmark

Since it was a smaller conference, I had more opportunities to talk more in depth with other students, researchers and experts in various fields. The highlight of this conference was that students had the opportunity to have lunch one on one with one of the guest speakers of the event. I had the privilege to have a lunch with Donald Broom, a retired professor from the University of Cambridge, who was one of the pioneer researchers in Animal Welfare in various species

from domestic to wild animals. We talked for one hour about my research, what I can do as a doctoral student for my next project, and general good advice to take into account for the future. It was also surprising to see studies using drones in other species, not just horses, where they are used for studying behavioral responses and locomotion studies. I was able to talk with many students and ISAE was more enjoyable as I got more feedback regarding my work.

I am very grateful to my supervisor, PWS professors and staff for giving me the opportunity to participate in the horse course and learn how to use drones in ways it can help research, study another type of animals that is not a primate, as well assisting to both the Behaviour and ISAE conference. It was my first experience to go both to Portugal and Denmark, and it would not have been possible to do so without PWS support.





At Porto having a day in the sun before heading to Lisbon to Behavior 2017.



On top of the mountain observing hoses with drones.



North of Estoril in the castle area of Portugal!



Venue for ISAE 2017 in Aarhus Denmark.
