



Murray Foundation School Award: Operation Wallacea Post-Season Report 2018

Allestree Woodlands School, Derby - Croatia

Allestree Woodlands School is a mixed comprehensive school in Derby with about 1300 students on roll. Whilst the school occupies a position in the suburbs, the catchment area covers many different districts in Derby and about 20% of students are classed as disadvantaged. The expedition was open to any students who would be in Y11, 12 or 13 in the summer of 2018. This meant that a mix of students signed up; some who were avid scientists and who were dreaming of a career in marine or environmental biology, some who were aiming to be engineers and some who really didn't like science much at all but thought it looked like an interesting experience! A total of 18 students ended up going on the trip and out of the final group of students, four came from disadvantaged backgrounds with very low family incomes. For these students in particular, fundraising was a big challenge. In total we had seven Y11 students, three Y12 students and eight Y13 students who attended with two teachers.

We all completed different amounts and types of fundraising depending on our financial positions and time constraints. As a group we ran a Halloween Disco for Y7 students, completed bag packing at Morrisons and Co-op and ran cake sales at Open evenings. Individually there were many different activities; one student went around local businesses getting pledges and then ran a raffle for them, one did a charity bike ride from London to Paris in 48 hours and one did sweet jar sales both inside and outside of school. There were multiple additional cake sales, lots of extra jobs done around homes and many hours in part-time jobs that also contributed to the fundraising total. A number of the disadvantaged students also applied for local grants in order to increase their totals since the trip was £1800 before transport, dive costs and personal equipment. Students who were fundraising in school met up at lunch each Friday to discuss what to do next and prepare for these events.



In terms of training, eight of us completed the PADI referral course in March; this meant that we spent a day in school completing the PADI theory test during one morning and going in the school pool do complete our shallow water skills in the afternoon. It was a very long day and it was snowing by the afternoon too, so even getting home was a challenge!

Thankfully we all passed the test and this allowed us to go straight into Open Water dives when we got to the Miljet site in Croatia, followed by helping research scientists with their surveys. We had a number of meetings after school during the build-up to going; there was an initial presentation about fundraising from Operation Wallacea, then internal presentations to go over the site-specific materials and videos that were ran by our teachers. In the week before the expedition, we all had a group meeting run by Ms Marchant, the teacher who was taking us on the trip. We had an equipment check, did some team-building tasks to get to know each other better and completed some quizzes about Croatia and Croatian culture.

The trip was made up of two separate sites; the first week was in the land-based National Park, Krka and the second week was at the marine National park on the island of Miljet. Both weeks had their challenges and were enjoyable in different ways! We were paired up with a second school who had brought five students and one of the enjoyable things about the second week was that we all had more simultaneous free time to get to know them all better.

During the first week we were split into five small groups and each group rotated between different activities. One day was spent doing fish surveys followed by fish dissections, one day doing bird and then bat surveys involving using mist nets, one day involved herpetology walks to find or replace reptiles and amphibians, one day was focussed on a cave survey and lab work to identify species and one day was focussed on large mammal surveys. Every day included morning, afternoon and evening activities with whole group lectures around lunch and dinner time. Timings for the different surveys were varied as it depended on the needs of that survey; because the data we were collecting was real data this had to be the same each day! When that meant being ready to go on survey at 4am and then staying up until midnight it involved lots of strategic naps! We all saw some field survey techniques that were new to us and the scientists were all very friendly and happy to talk about their work and the paths they had taken to get into those roles. Some group highlights include going on some very long walks to find a wolf den that involved using a machete to get through juniper bushes, finding wild tortoises, learning how to set nets for fish surveys, the mist-netting for bats and birds (a favourite for all groups as we saw a lot of creatures up close that we would never normally see) and going into the cave complexes, of which we learnt there were many in that area of Croatia. We also got to go on a long boat trip and walk to the beautiful waterfalls in the more touristic part of the park at the end of the week. We were still on









duty and were trying to take as many pictures as possible; this led us to getting some great photos of a rare sub-species of snake in one of the crystal-clear pools in between finding ice-cream.

The social side was also a real highlight for many from the group, as a number of students had never really spent much time with those outside of their own year group before. We had various activities that were run to get staff and students to interact; the most enjoyable being the 'ninja game' which involved a challenge to pass a randomly selected item to a randomly selected person during the week (which meant they were then out of the game). The karaoke on the final night provided much laughter as well as the staff team outperformed the students by a long way (the videos are too blurry to send but it involved broomsticks for microphones).

In the second week the physical nature of the expedition changed a lot as hours of walking each day turned into hours of swimming and diving. There were no 4am starts (thankfully) and most groups had their free time all together, so students got to spend time polishing up their card games skills and getting to know those from the other school as well. Most students took the diving option but we had a few who chose to snorkel as they were not as confident underwater. This was added to by a few who struggled to pressurise and therefore could unfortunately not complete their PADI. They did really enjoy the free-diving in particular so no-one felt that they did not enjoy the week and everyone got to see a wide variety of wildlife. The students who had completed the referral course got to join in with the scientists on a number of days with measuring 'Pina Noblis' – giant Pen Shells – in the small marine lake nearby. This location may have the greatest density of the shells in the world so what we were doing was really vital. It was also really hard to do as it involved hovering underwater, upside down whilst having a ruler in one hand, a slate and pencil in the other and measuring the shells without kicking them or kicking up silt! We also learnt how to do Posidonia (sea-grass) surveys and did some beach and ocean clean-ups. The shocking thing was how much plastic litter there was in even this area!





During our time in Croatia, we all found out a lot more about what endemic species were and how endangered many of them were in the mainland and in the oceans. The number of invasive fish species in particular was astonishing and so easily preventable. The lectures and films in the marine week in particular really highlighted how bad the 'plastic plight' is as we had expected that a national part on a fairly remote island would be fine. We were very wrong. The issues with petrochemicals and the bioaccumulation was also something that we did not realise the scale of; even the teachers were surprised at how bad the reality was. Lots of discussions followed regarding what we buy and use; lots of us are making changes to reduce how much disposable plastic we use. Another animated discussion was what people chose to eat; the proportion of vegans and vegetarians was very high amongst research staff and we had a vegan and two vegetarians amongst the students too. When we had lectures about ethical issues regarding the rights of animals, the use of land and global warming levels so the 'don't eat as much meat' was a really interesting debate that has made a number of us much more aware of the impact of what we are eating.

The primary intention of the grant was to cover the cost of transportation from the school to and from the London airports. All of the internal travel in Croatia was included but the initial part was not, since schools would all be coming from different parts of the UK at different times. We also had different initial and final destinations in Croatia and therefore different airports in the UK for our departure and arrival; we flew out of Heathrow and landed at Gatwick.

Our school is in Derby so isn't particularly close to either of these! Many students were working part time jobs to help with funding but with the majority of participants in Y13 and Y11 they needed to ease off this when it came to exam time; not having to worry about covering travel costs really helped them to be able to do this. The coach ended up costing £750 for the return journey leaving us £250 to put towards other expenses. These were namely the personal identification cards (PICs) for the divers; and to the remaining £90 was used to help complete the funding of three Y11 students who had each really struggled; they were all from families where the money was tight and this allowed them to purchase some of the necessary equipment as it went towards wetsuits or walking boots.

We would all like to thank the Murray Foundation for their generous donation which enabled many of our students to access the trip and eased the pressure off at exam time for many others, which was hugely beneficial considering that the majority of participants were in Y13 or Y11. The trip was a life-changing experience for many and this is not an exaggeration; career paths have been altered, personal lifestyle choices have changed, and we have learnt skills that will stay with us for life.

Allestree Woodlands School Quotes

Zach: "During the two weeks I spent in Croatia I have discovered and learnt about endemic species in the Mediterranean and Croatia, and about how and why they need to be protected. I now also realise just how much damage plastics in the ocean cause, having seen first-hand the waste in the water of a national park."

Heath: "I have gained a lot of knowledge regarding different types of mammals/fish/herps living in the Krka and Miljet National parks."

Tom: "I have worked with researchers doing surveys on endemic wildlife in areas I never knew existed trying to document problems that I didn't know were there"

Ben: "Operation Wallacea has made a big difference in my life. First of all, I met loads of amazing new people with whom I am now firm friends and have improved on existing friendships too. Furthermore, I have learnt many interesting new things in topic areas such as marine and terrestrial conservation, endemic species in Croatia, the impact of plastic waste on the environment and the progression and huge impacts of global warming."

George: "The experience has made a huge difference to me as it has allowed me to do things I would not have normally done, such as going out on wildlife surveys. It has also allowed me to overcome fears I had."

Marshall: "It provided strong character development for myself, becoming more appreciative in life of the things we have. We also learned a lot of biology!"

Lauren: "I think I have overcome certain fears and worries about activities whilst making amazing new friends"

Ella: "An amazing experience where I made lots of new friends with lots of different people"

Ella: "Amazing opportunities to see wildlife in a totally new way. It challenged me at times but I have done things that I never knew were possible and have qualified as a PADI diver too!"

Will: "I went into this trip wanting a career in marine biology. The experience has just re-enforced the need for more people to work in this area. I am really proud of what we all achieved."





Boston college, Lincolnshire - South Africa

Our group went to South Africa in July 2018 with the much-needed help and support provided from the Murray Foundation Award.

Our group self-named the South Africa 'tribe' are based around Lincolnshire and came together on the Level 3 Animal Management course offered at Boston College. The group comprises of five learners aged 18-26 and our fabulous Animal unit manager – Jackie. Jackie's philosophy for the animal unit when it comes to obtaining animals for us to study is to use animals that need rehoming from rescue centres or helping where she can - giving the animal another chance. The animal unit has expanded over the last three years from receiving animals in this way. In 2016, Jackie came to our class with the idea of helping on research projects in South Africa. Many of us jumped at the chance and got stuck in to fundraising to make it possible.

We did various things to raise the money; we started off by doing Bags to schools – the collection of old clothes for cash. The whole college got behind us. This was followed by a chocolate event which was also popular. We decided to use the resources we had an offer cubs and brownies to come in to the animal unit for an animal experience for a donation towards the funds to South Africa. This proved really popular. We also organised a raffle and received some lovely donations from local businesses which we raffled at a nearby pub on a karaoke night. Some of us did car boots sales, others took on additional part time work to help pay our way. Two of us used some inheritance money to get close to our goal.



We had a meeting with the college resource manager who looked into various grants and Jackie received information from Operation Wallacea for applying for the Murray Foundation Award. The five of us put together a presentation and forgot about it. We were really struggling to get the monies together in the last weeks. But we hadn't even thought about our equipment that we would require. There was a very real possibility that we were not going to reach our target, not only would we be unable to go to South Africa but we would lose so much money that we already paid in. Some of our group did pull out with the worry and stress of getting the money on top of all our animal exams too. We were quite down beat when we received the news of being awarded the grant from the Murray Foundation. We were ecstatic! There was disbelief then the excitement kicked in, this is real it is going to happen. That grant was such a massive help! In the end with a lot of bumps on the way we reached our target and it was like a breath of fresh air, it was an amazing feeling that our little group had done it and we were going to South Africa in a couple of months.

In the few weeks leading up to us leaving for South Africa it was a race against time to get all our equipment ready and packed. Jackie called various frequent meetings and we sat and discussed equipment and who was going to bring what, what we needed, inoculations etc and had some fun learning bird song and bird identification... we all found that really hard but we did have a lot of fun being tested on it. We ordered all the same T shits, and broke in our walking boots...

Finally, the day was here!

We all met at the college with our suitcases so we could have some photos taken for marketing and for the college to show off what we had achieved. We got into the taxi and were off to Heathrow Airport. It was Chloe's first time flying and she was overwhelmed with nerves, scared but so excited. After an 11 hour flight we landed in Johannesburg and I can't tell you how amazing everything was, it was so colourful, vibrant and beautiful. At the airport we met the other two groups we would be living with for the next two weeks. One group was from Spain and the other was from Brazil and they were all very welcoming and just as excited as us. We all got on a coach and were on our way to the first camp. About an hour before we got to the first camp we changed vehicles to open top trucks and this is where we met our teachers for the week. We went through Kruger national park in the open top trucks and then into Balule nature reserve into the campsite, on our way we saw out first African animals! Impala, giraffes and zebras! We all had our cameras out and we couldn't believe how lucky were to see these animals in their natural habitat. When we got to camp we were shown to our dorms and had a welcome dinner which was very nice, we were also given our schedule for the week which was comprised of many surveys on the animals and plants and also some lectures. Lastly, we were given a health and safety talk and we were finally allowed to go to bed!





Our first real day in South Africa was incredible, the sights we saw, the animals we encountered and the things we learnt was just crazy! Every day at Balule was different and interesting, we learnt so many skills and made so many memories it honestly was the best week of our lives. From day one at the Sturwig reserve we had early morning lectures and some bush action helping take part in bird counts and vegetation surveys. The best part of the whole trip



was the surroundings, the people, the noises and the scenery. It was breath taking at times, hearing and seeing all the amazing animals you only got to see on TV. The best part was seeing our first animal, wild animal, in the bush and this was just amazing. Seeing zebras and giraffe was something we never thought we would see with our own eyes in the wild. The highlight was seeing our first sightings of elephants. From spotting a few in the bush to having a herd of 26 just the other side of the river from where we were staying.

We really didn't want to leave but we had another fun packed week ahead of us.

So we left Balule at 4.30 in the morning to go to our new home for the remainder of the trip. Our travels to Sodwana Bay took 13 hours on the coach which was OK considering most of us slept almost the whole way. When we arrived, we had a welcome dinner again which was really nice and we were shown to our tents and had a welcome talk to put us into groups before we were allowed to bed.

The second week of the South Africa adventure took us to Sodwana bay. The first day was challenging to say the least, we were driven to a scuba diving centre where we had to learn and take a test as well as do five pool dives before we were allowed into the open ocean. This was spread over 3 days which made it easier, but for some of us the pool lessons were overwhelming, and we struggled at first breathing under the water and carrying out the vital skills. However, after overcoming our fears we flew through the rest and was in Open Ocean before we knew it! During the middle part of the week we got our first views of the beach and where we would be diving. It was an amazing sight. The long sandy beaches and the occasional tail splash from a whale out on the horizon, incredible! All our scuba gear was set out for us and we were on a rotation so one group went out and another came in, it was really well organised. While we waited to go for our first ocean dives we went to the cafe on the beach and officially got addicted to blueberry or vanilla milkshakes with calamari and chips! Joined with a view of the see, beautiful! We had to do five ocean dives in total where we had to repeat the skills we learnt in the pool. Highlights for the second week was falling backwards of the boat and starting our first sea dive. Seeing all the amazing wildlife at the bottom of the sea was stunning. Getting to see all different types of fish we didn't even knew existed.





When it was time to leave we were so sad, and on the coach back we were all reminiscing about our amazing adventure and how we never wanted to leave. When we got back to England we were all so sad that the two weeks we had been looking forward to for two years was actually over. So, we made a deal that we would go back to South Africa again as a group and do it all again! We all thoroughly enjoyed South Africa and for all of us it was a life changing experience, we would absolutely go back again and if it wasn't for the grant money from the Murray foundation that gave us that last final push we don't think the trip would have even gone ahead. So, from the South Africa tribe of Boston College, thank you Murray foundation for our grant!

Boston College Quotes

Declan: "My experience to Africa didn't just open my eyes to the animal industry but to my opportunities to learn more about myself and where I want to go in conservation"

Brittany: "I have learnt so much from the lectures, from participating in the research, learning from the field guides and developing new skills but learnt even more form the cultural element that Africa had to offer me as well as the chances to work with other international learners. I have learnt to communicate with people even though we don't all speak the same language."

Sam: "Being out in South Africa made me extremely happy, it's a beautiful place I plan on returning to and making even more amazing memories and see more amazing animals."

Chloe: "The first ocean dive honestly changed my life! Nothing will ever compare to how that first dive made me feel, it was incredible to see these beautiful underwater creatures in their natural habitat and feeling what these animals feel. Breathing underwater is the most amazing thing and I would 1000% do it again. The best thing that happened to me on my South Africa trip was when I swam with a sea turtle on one of my open water dives, it was incredible being so close to such an amazing, beautiful animal. I also found teeth that belonged to a ragged tooth shark! That's something I can keep forever and I can say I picked this up from the bottom of the ocean! Believe in yourself, take the chance, it could change your life"

Rob: "The trip to South Africa was a once in a lifetime opportunity and it was absolutely amazing. From the taxi to Heathrow airport to the taxi back home I had a constant smile on my face. The trip opened my eyes and I got to see how other cultures lived and survived."

Jackie (group leader): "To see five of my learners, excited, engaged and passionate, giving them a focus, a direction and a determination to achieve something in life that they can make a difference, that no matter what background you come from you can achieve, they can contribute to science and they as an individual really do matter in the world, for them to start believing in themselves and discovering what after college their next pathway could be. The opportunities this will open for them not only excites me but humbles me that there is another generation of caring animal ambassadors in the making has to be a wonderful thing."

The Boston College South Africa Tribe: "The Murray foundation funding made the dream become a reality. We did it. We got the money we required. For that we are eternally grateful. From all six of us - Thank you!"





Dulwich College, London – Ecuador & Galapagos

The Dulwich College team of 23 students and 4 staff were hugely excited to go to Ecuador and Galapagos this summer, especially having heard about the previous two Opwall trips that the school had done. As the Galapagos is any expensive destination we had worked hard with our fundraising – cake sales, Christmas Fairs, Pimms Tents and even face painting. We were hugely grateful for the Murray Foundation Award as we did struggle to meet our goals but luckily, we had a very successful final fundraising event which included selling plants at our Founders Day celebrations. The Murray Foundation Award was spent on T-shirts for all the members of the group and also a very welcome slap up meal for after we came out of the rainforest. When asking my peers about the trip, **Will M** voiced the common opinion that "the trip was an incredible experience, giving us a chance to see two of the most unique and diverse places on earth". Huge thanks to the Murray Foundation to help make it possible for us all.



The 2018 trip began at Heathrow airport. The journey to Ecuador involved two flights overnight, and our arrival in Quito was met with much relief, however this was only the start of the journey. The following day we enjoyed a six-hour stunning bus journey over the mountains and through the cloud forest. This was the first indication of the natural beauty of the landscape we would be surrounding ourselves in for the following week. Having arrived in Coca, we boarded a speed boat that would take us for two hours down a major tributary to the Amazon, the Napo River. As the speedboats departed and I looked back at the rapidly-receding city I realised that this would be my last glance at civilisation for a week. During the last leg of the journey — a two-hour canoe ride — we experienced our first taste of jungle weather, with a Biblical downpour that quickly soaked everyone and everything. It was then we learned that the area had experienced it's heaviest ever week of rainfall and our adventures began with a walk through the

rainforest to the camp on a boardwalk that was at least a foot underwater. Luckily it was only one of our teachers, Dr Cue, who managed to get drenched by falling off the side of the underwater boardwalk.

When not working out how to dry our feet and clothes, the rest of our time in the Amazon was spent assisting various scientist with their data gathering. We split into four groups, each with a rotating daily routine, with some early starts for bird watching from a Ceiba tree tower 50 metres above the ground, or tracking mammals along trails lined with camera traps, as howler monkeys and rare woolly monkeys raced through the canopy above you. As **Seb L** said though it was "definitely worth getting up and going to the canopy tower to be surrounded by all those birds and monkeys". A highlight for many of the students was watching some of the camera trap footage that was collected with Sean – seeing jaguar on the trails that we had just walked was incredible.

One of the group's favourite activities was wielding makeshift butterfly nets made from mosquito netting to great effect, catching butterflies of dazzling colour, using various guides to ID them, and then pin them in an effort to create the first complete guide to the Butterfly populations of the area. There were also some fabulous herp collections.... One evening, having arrived back to camp after a tiring survey, Sophia, the camp leader, ran with two guides out of the camp with a snake pole and a large bucket returning with a 3-metre-long giant bird snake in the bucket. For many of us this was our first encounter with an Amazon snake, and upon Ollie's return from a survey we were able to see it properly. We were amazed with the composure with which Ollie handled the snake which repeatedly struck at him, it was the first of many encounters with the wildlife of the jungle. For many, including **Harry M**, "it was the opportunity to explore biodiverse and unique habitats with the help of knowledgeable and interested staff that made the Amazon so special." Caiman 'hunting' as an evening herp activity was hugely popular and again the skill and knowledge of the guides and Ollie was awe-inspiring.









Some other encounters though were slightly less welcome; one of the biggest concerns shared by some in the group, (including one of our own teachers), were the notorious jungle spiders, including the tarantulas and the more dangerous wandering spiders. On the third night a group of us were returning to out platform that housed our tent underneath a thatched roof, when a stray headlight torch revealed a large, hairy tarantula above our tent, my own worst fear. In an effort to overcome some of my fear, he was affectionately entitled 'Terry the Tarantula'. The Opwall staff were great at allaying our fears though and as **Olly F** says "not only did I find the guides

resourceful, but I felt that they provided a homely warmth to each and every one of us. This allowed me to fully enjoy the environment that surrounded me as I felt so welcomed and prepared". It was so reassuring having the lovely medic Clare with us in the camp to moan about any of our aches and pains. However, it was only our camp leader Sophia that actually had any unpleasant encounter during the week as she was bitten by a bullet ant, ow!

Our time in the Amazon was not only spent observing the incredibly vast array of wildlife, but learning about the local populations, particularly the Sani tribe, whose existence is a testament to the ability of local people and conservationists to push against oil companies who seek to ruin their lands. One day was spent by all students visiting the community and helping them by planting a medicine garden. It was an extremely enriching experience and for many it was an eye opener into our advantages. As **James L** comments, the trip was "an incredible opportunity to work with local people and scientists to help with their research in an effort to preserve the Amazon". Our time in the Amazon grew to an end with a bittersweet mix of sadness, at leaving the scientists and jungle we'd grown to love, with excitement and apprehension for the next stop in our journey, the Galapagos.

The plane's descent into the Galapagos airport offered an aerial view of the tiny islands that appeared seemingly from nowhere in the middle of the Pacific Ocean. As we disembarked the plane we were greeted with an arid, rocky environment, quite the juxtaposition to the wet, humid and luscious rainforest we had just come from. But as we moved towards the first location for our time in the Galapagos we noticed how quickly the environment changes with a few hundred metres of elevation. We moved from the desert like conditions of the airport, exquisite beaches, through grasslands until we reached a more familiar wet highlands environment, which is where we would be camping again for the first half of the week. We were to hear more about his zonation as the week progressed.

For many the Galapagos offered the most exciting activity of the trip, snorkelling and scuba diving. For those of us who were qualified we were able to partake in two amazing dives. For myself, these dives were my first outside the UK and I was incredibly excited for the opportunity to see more than a cold Windsor quarry. We weren't disappointed as on our first dive we were hit by the amount of fish, and other impressive marine life such as white and black tipped sharks, hammer head sharks and a school of spotted eagle rays. The second dive was an equally exciting prospect, we were told beforehand it was a frequently visited 'cleaning station' for green sea turtles and more white-tipped sharks, a place which they could have their bodies cleaned of parasites by smaller fish. The biodiversity of the reef was astounding, the graceful silhouettes of the turtles that swam around us, and we were lucky enough to experience several up-close encounters with them. James was just one of many that "particularly enjoyed the various dives we did in the Galapagos and the opportunity to explore pristine marine life" and this included the chance to snorkel with sea lions. We felt somewhat clumsy in the water as a multitude of sea lions nimbly played around us, but it really was an experience that none of us will ever forget. The lectures in the Galapagos gave us more insight into the history of the islands and an explanation into their astounding biodiversity and high levels of endemic species. These lectures were paired with group outings to places such as the Darwin centre and the lava tunnels of the island to further enrich our experience and learning. The amount we learnt during our two weeks is what makes an Opwall trip fairly unique and as Olly comments "what stood out for me about this trip was not only the unique areas we went to, but the knowledge I gained".





Our journey home brought with it the prospects of a real bed, home food, and of course most importantly for 23 teenage boys, mobile reception. We arrived back in Heathrow, after 2 weeks away, tired and considerably dirtier but having had the most incredible experience.

Felix sums it up well when he says "this once in a lifetime trip was invaluable in the learning and experience it provided. I was overwhelmed by the entire two weeks - being able to see the wonders of the Amazon and the beautiful nature of the Galápagos Islands. Not only was I able to learn about the endemic species of the various biomes I visited but also the cultures of the local indigenous peoples and the ecological problems faced in the areas".

Thank you Operation Wallacea and the Murray Foundation!





Hyndland Secondary School, Glasgow – Ecuador & Galapagos

On Sunday 17th June 2018, 19 young people and 4 staff set off from Hyndland Secondary School in Glasgow to Ecuador & Galapagos. Two days later, after 3 flights, several hours on a bus over the Andes, a speed boat along the Napo River and canoeing deep into the Amazon Rainforest, the Hyndland Expedition Team arrived in camp.

This was however only the final 2 days of what had been a journey of almost 2 years preparation and fundraising to get the team to South America. On top of individual fundraising efforts which included some members of the team climbing Ben Nevis, fashion sales and online crowdfunding, our overall group fundraising efforts took place as part of our Spero Meliora Campaign which we ran within our school to raise funds for our trip and also to purchase a school minibus amongst other things. We ran events such as a Quiz Night including a special 'Beat the Pundit' round with Scottish Football Pundit Hugh Keevins, as well as bag packing at Sainsburys and a series of inspirational evening lectures. We ran 3 lectures in the run up to the expedition with guest speakers including Eilidh Doyle (Scotland's most decorated athlete and captain of the British Athletics Team), Mark Beaumont (World Record Cyclist who had just finished cycling around the world in 78 days!) and Doug Allan (Sir David Attenborough's principal cameraman). These lectures not only helped raise funds, but they allowed us the opportunity to inspire our school community and promote our school motto which stands for 'I hope for better things'. Each speaker shared stories of success, endurance, ambition and determination and how they hoped for better things. These messages tied in well with our expedition in terms of the skills we would need to cope while away and also with the important research that the OPWALL scientists carry out to help conserve the special places we would be visiting. We also produced a school calendar and had a number of bake sales within school as well as hosting an Easter Fair where we were joined by Bonnie the Seal, the mascot for the 2018 European Championships! Our application for the Murray Foundation Grant, took the shape of a 15 minute video presentation which included members of our team interviewing some of the guest speakers from our evening lectures. We were absolutely delighted when we heard that the Murray Foundation had awarded us £1000 wish that we had had the chance to thank them in person for the generous assistance. Our fundraising and the Murray Foundation Grant allowed us to not only cover our expedition and travel costs but also allowed us to get long sleeved expedition shirts and hats, as well as arrange an additional day trip to visit Mitad Del Mundo so we could stand on the Equator!



After this 2 year journey, we had already learned a huge amount about ourselves, what we were capable of and bonded as a team and on Tuesday 19th June 2018 as we paddled into the Sani Reserve, listening to the roars of Howler monkeys and catching our first glance of a Capuchan monkey we realised that it had all been worth it. Walking into the idyllic camp which we would call home for the first week was incredibly exciting, and although some of us were initially a little anxious about sharing our platforms with spiders we immediately began to feel more relaxed as we met the team of scientists and local Sani guides over a delicious meal of soup followed by beef stew and rice. That first









night, although exhausted from the journey, many of us lay in our tents mesmerised by the sound of the jungle orchestra all around us. We had made it!

We split into 4 groups and rotated around a variety of activities, working with scientists to collect data over the course of our expedition. The passion of the scientists was infectious and as we were on different groups, we would spend the evenings playing cards and sharing stories about what we had seen during the day. On Wednesday 20th June, Sean McHugh, one of the OPWALL scientists who was using camera traps to study mammals took one group out to collect data cards and in the afternoon as the group were looking at what the cameras had seen there was a sudden shriek of excitement from Sean. One of the camera traps had captured footage of a group of Bushdogs, a species which he was desperate to study and one which there is very limited footage. It was an incredible honour for us all to share this experience with him and to gain such an understanding as to the importance of such discoveries for both Sean as a scientist and for the general field.

The birding groups got the opportunity to see a number of tropical bird species up close by using mist nets and also had the opportunity to go up the Sani Tower to the top of the canopy. The tower is 35m high and accessed by a metal stair case which as you climb higher starts to sway slightly! The wooden platform at the top offers some incredible views over the forest and each group who had the chance to go up either at day or at night had different stories to share. One group met some local Ecuadorian students who shared stories and even ended up sharing a rather surreal experience of singing Taylor Swift and Amy Winehouse as they discussed the similarities and differences of their own cultures! Another group witnessed the distressing sight of a large oil fire in the distance from another part of the forest where the local indigenous people had sold out to oil companies. This just further highlighted the importance of the work being done by both OPWALL and the Sani Community to protect this incredible habitat.

Ollie Thomas, the herpetologist took groups out by both day and night collecting data. One evening a group had the excitement of capturing a little baby spectacled caiman (*Caiman crocodilus*) and taking various measurements before releasing it back into the lagoon. Searching for caiman at night by headtorch was quite exhilarating, especially when their eyes reflected the light when you spotted one! We also saw a variety of snakes and frogs! Eodin O'Mahony, was a conservation biologist who took us out doing vegetation surveys and was really nice. She helped teach us how to use the equipment and allowed us to survey various plots as she collected data. She gave a really interesting lecture, as did the other scientists, and was always happy to answer questions and just chat.On the final day we trekked to the





community where we met the local Sani people who live in the rainforest and learned about the struggles they face with modern day issues such as oil drilling as well as preparing and eating the local cuisine. We met family of Bill and Horhay who had been with us throughout the week and took part in a football match against the locals. It was sad to say goodbye to the team, and we made our way back to Quito with our new friend Freddy, the OPWALL country manager, with an essential stop for Empanadas at the top of the Andes. Freddy was a constant source of fun and reassurance throughout our first week in the jungle and we were sorry that he wasn't able to join us for the second half of our expedition. The second week of the expedition was spent in the magnificent Galápagos Islands where the majority of the week was spent in the highlands which turned out to have very similar weather to Scotland which was unexpected. However, when we returned to sea level it was sunny and hot which made snorkelling that much better as we saw many schools of fish, Galapagos sharks and even turtles just beneath us which was extraordinary. One of the first highlights in the Galapagos was visiting the Charles Darwin Research Centre where we were able to see a variety of different tortoise species and get an immediate understanding of various aspects of life in the Galapagos. That evening we all got together with our sleeping bags and some snacks and watched David Attenborough's Galapagos Documentary on a projector sitting on the roof of the building where we ate our meals.

Some of our group had the incredible opportunity to go diving while others had an extra snorkelling session. As this was the first time anyone in the group had tried diving it was really quite special and everyone agreed that they would want to do it again. Both divers and snorkelers got very close to the corral getting extremely close to the sharks and even swam with Sea Lions and turtles!! Over the week we were able to explore the island and learned a lot about the flora, fauna and geology of Galapagos. We trekked through the Bellavista Lava Tunnel (the second largest in South America) and spent time on the most beautiful and secluded beaches which were swarming with iguanas who called this extraordinary place their home.

This was our schools' first OPWALL experience, and we all feel immensely lucky and proud to have had this chance. Without the help of our teachers, our families, the Murray Foundation and all who helped us throughout our journey before and during the expedition itself, none of this would have been possible. We will always be extremely grateful and hope that other young people have the same opportunity to learn in such amazing places. Thank you.

The Hyndland Expedition Team

#HyndlandExpedition2018

Hyndland secondary School Quotes

Beth: "Going to Ecuador & Galapagos Islands was a once in a lifetime experience that I will never forget. I feel very privileged to have had this amazing experience as very few people will ever be able to go to such a remote, and magical place. This wouldn't have been possible without the teachers, school, OPWALL and the Murray Foundation. I will be forever grateful to them all. Thank you."

Neve: "My Ecuador & Galapagos experience was by far the most exciting, educational and emotional trip I have ever been on. The diverse culture and atmosphere was interesting and impacting on many levels. It is something I will never forget. Thank you to OPWALL, the teachers and to the Murray Foundation for allowing us this chance to go on this incredible expedition. Seeing the way people and animals live in a habitat I have never seen before was truly inspirational and amazing."

Simon: "Going to Ecuador & Galapagos was an amazing time, learning about the species that live there and the culture of the people too. My favourite part of the trip was going diving in Galapagos, seeing the marine life was an extraordinary experience that I will never forget. A big thanks to OPWALL, the leaders, our teachers, and the Murray Foundation to let me come on this life changing trip."

Eilis: "This was an unforgettable experience and I cannot thank the teachers, OPWALL and the Murray Foundation enough"

Jennifer: "This was a once in a lifetime experience that I will never forget, I feel very lucky to have explored such remote parts of the world and am so grateful to the Murray foundation who help us make it possible."

Ayman: "I found my time in Ecuador and Galapagos to be incredible. It was informative, enjoyable, and most of all, unforgettable. My favourite moment would have to be snorkeling off the coast of one of the islands. Getting so close to sharks and sea lions was surreal. I would like to thank our teachers at Hyndland Secondary who made this trip happen and also the Murray Foundation and OPWALL staff who help us before and during our adventure."





King Edward VI School, Suffolk - Madagascar

Our school, King Edward VI School in Bury St Edmunds, took part in an expedition to Madagascar in the summer of July 2018. Having originally signed up in the summer of 2017, Manon, Lottie and I all knew that we'd have to do very strategic planning in order to raise the funds to enable us to take part in such an adventure of a lifetime. The expedition group was made up of 19 students who were sixth form students so either 17 or 18 years old and 2 teachers.

Our fundraising was very successful and due to the much-needed generosity of others we were able to take part in the expedition. Our fundraising wasn't plentiful due to our desire to make the events we did put on to be as much of a unique experience as we could and therefore attract the most attention. We began with a bake sale within school, we found that to hold an event such as this within school gave us the greatest opportunity to sell enough to raise as many funds as we could. The bake sale raised a very good figure and encouraged us to hold a larger seasonal event at Christmas. This event was a quiz night and this, even though required lots of hard work and planning to organise the quiz itself, hold another bake sale simultaneously to the quiz night and to visit local shops and organisations to gather prizes for the raffle also, was a success once again and made another impressive total for us to be able to put towards our expedition. Our fundraising efforts allowed us to believe that we could hold a strong application to receive an additional grant from the Murray Foundation.

Preparing for the expedition required quite a lot of time to be able to purchase everything that we needed. The kit list was used a lot! The money gathered from the Murray Foundations' grant was used, personally, just to buy the kit as I had never been on a trip such as this from Operation Wallacea and I knew that getting the right kit was as important as raising the money. We met with our expedition group frequently in order to bond more as a group as we were aware of how close we'd become over the 19 days of being in Madagascar as many of us didn't know each other beforehand. We would like to thank the Murray Foundation especially as the £1000 grant which they very kindly gave to us enabled us to take part in the expedition and create memories from such a beautiful country which we can cherish and look back on as an experience of a lifetime. The trip in itself taught us to be more independent as we

travelled, for most of us, for the first time without our families. Once we arrived at our base camp in Mariarano our group made the trek to one of the two satellite camps in Matsedroy. Staying for three nights we shared in tents of two. Here we got our first taste of working with research scientists, helping them collect well needed data. Our first survey was spiders! We were given little tubes and told simply - catch them! It was pitch black and around 9pm so searching for the eye glare of spiders with a head torch was hard at first but we all got the hand of it by the end. Of course, it was also nerve-racking at first, especially when we saw size of the spiders the local guides were catching. However, knowing that we had a 50% chance of catching a new species of spider was mind-blowing. To be able to know that you could be the discoverer of new species made all of the travelling and sleeping in a tent worth it. Also, we were told about a highly endangered specifies of spider called the Ghost spider. One of the researchers was even staying behind after Wallacea had pack up because it was believed that on one side of a nearby lake in Matsedroy was





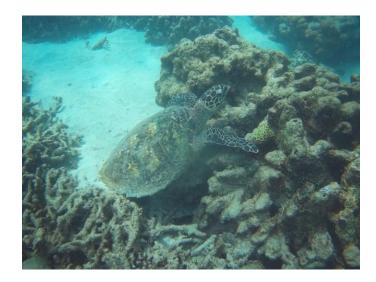
the last place in the world they existed - we saw two. It is experiences like this that you cannot get anywhere else. More surveys in Matsedroy followed, that included counting and identifying animals such as, frogs, birds (many native to only Madagascar), herps, butterflies and my favourite, lemurs. We were really lucky to see 15 lemurs in total on just a three-hour trek. We saw 4 brown lemurs and 11 Sifaka lemurs. We were privileged to be able to walk underneath and around their territories getting unimaginably close to them. After spotting our first lemur I realised how fortuitous it was being able to watch live animals in their wild habitats. This feeling is not something that can be replicated in a zoo. This was not the only time we saw them as well. When arriving back at base camp in Mariarano, we were greeted by lemurs jumping around the tree above our tents. An almost surreal experience to see wild lemurs meters away from us.

Now back at base camp we were also able to visit the local school. A humbling morning where we were able to play and sing with the local children. Our school had brought books and schools equipment that would be handed out my Wallacea at the end of the six weeks to ensure it was split evenly amongst the local schools. Playing duck, duck, goose with the children was a highlight of the whole trip for me and something I will remember for a lifetime.

At the beginning of our second week, we travelled to the port of Ankify in the north of Madagascar and boarded the ferry to Nosy Be. Only a short drive from Hell-Ville, we reached our destination. The marine site was so welcoming, for the first time in a week, we had flushing toilets and running water! It was a really social environment and the location was beautiful. We decided to snorkel on our second week of the expedition and we all thoroughly enjoyed it. On our first day we spent the morning learning how to free dive amongst the islands of Nosy Komba. We came back to food (that wasn't rice and beans!!) and a lunch time lecture with marine expert Masha.

We learnt loads of facts about our environment and ways in which we can help it in the future. Following this, we went on our second snorkel of the day to sexy sixty (named due to its diversity of marine life and amazing coral). We learnt how to document the effects of coral bleaching on different forms of coral. For anyone who isn't too sure about diving, I couldn't recommend snorkelling enough, we saw so much on each snorkel. In the evening, we had more lectures followed by movies and quizzes. Our second day, we spent snorkelling within the mangroves. It was really interesting

to put what we had learnt in our lectures into practice. During our breaks, we spent time sunbathing and walking along the beach in the sun. On our third day we went out in the morning to Nosy Sakatia - a hotspot for green sea turtles.





Following a first unsuccessful dive, our snorkel instructor was determined to find some. After a few minutes of swimming we were fortunate enough to see around 20 different green sea turtles! This was definitely a highlight of our trip. Our last day was even better, we took the boat to the nature reserve of Nosy Tanihely. After an hour of identifying fish we swam into shore and explored the island. We walked up amongst the trees to the lighthouse - the views were amazing. After a while on the island we got back on the boat and snorkelled round the island on our last fun dive. We saw so many hawksbill turtles and so many beautiful species of fish. On our way back, we were fortunate enough to see a pod of dolphins jumping by the boat and saw the most amazing sunset. Our last day couldn't have been better!

Once again, all three of us would like to thank the Murray Foundation for their generous grant of which allowed us to take part in such an incredible expedition and to experiences things out of our comfort zone alongside working with exceptional scientists to uncover data of which is useful in preserving the biodiversity of such a wonderful country.

For further information on OpWall-MF School Grants webpage: https://www.opwall.com/about-opwall/grants/