

Laidlaw Programme Leadership in Action (LIA) Reflection

Scholar

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Title of LIA Project:	Marine conservation and education expedition

LIA: 4-week marine conservation and education programme

My leadership-in-action summer took me to Mozambique where I joined Love the Oceans' (LtO) 4-week expedition. LtO is a non-profit marine conservation organisation that works closely with the community in Jangamo Bay. This area is home to diverse marine life, including several coral, shark, and ray (elasmobranchs) species, and humpback whales. Additionally, these marine ecosystems provide a valuable source of food and income to the local community. Sadly, artisanal fisheries in these areas have targeted elasmobranchs, including species of IUCN concern. Furthermore, unsustainable fishing alongside the effects of climate change and pollution may negatively affect recruitment cycles, coral reef health and in turn the livelihoods of the locals. Moreover, 13 drownings in the past year highlighted the need for the improvement of sea safety knowledge and confidence in the water within the community.

LtO addresses these challenges through research, education, and diving. Alongside five other volunteers, I immersed myself in this rural area in Inhambane, delving deep into marine ecosystems and local culture. The project included:

1. carrying out fisheries, coral reef, and megafauna surveys to produce robust databases for data driven decision making.
2. carrying out beach cleans and upcycling bottle caps as a part of a local microbusiness initiative.
3. Assist teaching an ocean-based syllabus at local schools to educate students.
4. support swimming lessons for local children.
5. Improving local school facilities such as designing and painting a mural in a classroom.

From the very start, we engaged in knowledge on a wide range of topics, from fisheries to local species. Lectures and training sessions also included

professional conduct, inclusivity, CV workshops and so on. These sessions laid the foundation and expectations for the tasks and goals in the exciting weeks ahead.

One of the tasks aimed to collect fisheries data from 2 sites, Guinjata Bay and Paindane. The small-scale artisanal fisheries in the area used methods such as spear fishing, and gillnets from kayaks or boats. Fisheries activities heavily depended on weather, sea conditions and the intuition of the fishermen. Guinjata bay was a 15-minute walk while Paindane was a 40-minute walk. Considering all of this, to ensure effective data collection, fisheries data collection days had us starting out between 5.45-6am till 3-4pm. While previous data collected had contributed to proving unsustainability and suggest alternative method, our continued data collection aims to further assess sustainability of fisheries, inform policy-making and future research areas, and contribute to a larger database to establish a locally managed marine protected area (MPA). We made our first trip to Paindane knowing only a few Portuguese phrases from 'good morning' to 'measure fish?'. Despite the language barrier we managed to establish good relations with the fishermen by helping them push the boats out and engaging in conversation. The next day, we all prepared for our first dive to carry out a non-invasive visual transect survey. This included swimming with a GoPro 5m and 2m away from the transect tape to assess non-cryptic and cryptic species respectively, and filming quadrats along the transect for benthic habitat species analysis. Despite dividing roles and practicing protocols on land, we did not manage to collect any data due to the strong currents and miscommunication underwater. To overcome this obstacle, we divided to two groups for future tasks, agreed on hand signals, broke down tasks to more specific steps and made sure to always be aware of everyone when underwater.

Week 2 included fisheries, coral reef, and humpback whale behaviour data collection. Humpback whales migrate through Jangamo Bay between May and September. The presence of high number of whales will prove the ability to support sustainable ecotourism as an alternative livelihood for the local communities. Furthermore, young calves may indicate the presence of a nursery in this area. If so, the data collected will be valuable for future research and in establishing an MPA as well. We started off the week collecting fisheries data at Guinjata in the morning and whale watching in the afternoon. Although we successfully collected fisheries data before a storm rolled in, we headed back to our hut flooded. After quickly making sure our belongings were secure, we set off for whale watching as humpback whales enjoy playing in rocky conditions. Our other team set off for a full day at Paindane fisheries, and unfortunately did not manage to collect data due to the storm. As the storm persisted the next day, we collectively decided to take the day-off, and carry out our scheduled tasks over the weekend. This not only allowed us to collect more data efficiently but prioritised our wellbeing. The remainder of the week our two teams, took turns collecting fisheries data from the 2 sites, collecting whale data, and successfully completing eight transect dives. We spent our evenings logging data before sharing a meal and engaging in fun activities such as coconut bowling and karaoke.

Week 3 kicked off with a snorkelling transect at Coral Gardens in Paindane along with a beach clean. The following day we had a cultural tour where we visited the local schools, casava plantations, and LtO's community outreach manager, Pascoal's home. The day ended with the volunteers joining Pascoal's family in cooking and sharing a local meal. This allowed us to acknowledge how much our surrounding environment, the available facilities can affect our daily lives and culture. It also puts into perspective the things in life that are needed to be happy versus needed to live comfortably. The rest of the week was spent collecting and entering data. Analysing our diving footage allowed us to keep improving ourselves and improving the quality of our data collection.

We started our final week collecting whale data from the boat. As the waves were rough, we divided work accordingly, ensuring that everyone was comfortable with their assigned task. We also contributed to the upcycling project, cleaning and melting bottle caps into moulds of sea creatures to be used as jewellery or key rings. As there are already jewellery sellers in the area, and hopefully with the increase of tourism over time, this micro-business initiative will tackle plastic pollution while providing a source of income to the locals. The latter part of the week was spent painting the phonetic Portuguese alphabet in a newly built classroom at Guinjata school. For our first attempt, we painted the mural free hand, realising too late that it wasn't up to standard. Regardless of our hard efforts, we decided to re-paint it, this time allowing only one person to sketch to ensure consistency. We successfully finished painting the alphabet accompanied by waves and sea creatures. We even managed to finish a mural on photosynthesis at Paindane school. Additionally, we created a lesson plan on sea safety and taught it to 3 classrooms over 2 days, with the help and guidance from Pascoal. We initially planned a 3 part lesson to be taught over 3 days at Guinjata school. However, due to school being cancelled on the first day for a teachers' meeting, we had to condense our plan for 2 days. We had planned a few activities and a song to keep the students engaged. We delivered the first part of the lesson to 2 classes. As only one of the volunteers and Pascoal spoke Portuguese, it proved difficult for us to consistently keep the first class engaged. While we managed to deliver an engaging lesson to the second class, the non-Portuguese speaking volunteers were not able to interact as much with the students. To overcome this, we equally divided sections of the second part of the lesson, in a manner that compensates for the language barrier. Unfortunately, school had been cancelled again due to their teacher being sick. Instead, we managed to gather students at Paindane school, to deliver the lesson. We quickly put together a condensed lesson plan including both part one and part two and delegated parts amongst the volunteers. While delivering this lesson proved challenging due to the high volume of students and interruptions from surrounding loitering students, we managed to conduct our activities and even a quiz at the end where the students did well. The final task of our project was conducting swimming lessons on a Saturday afternoon. As an LtO pool is still in the making, a small pool at a nearby guest house is being used.

Approximately 80 kids of ages between 4-18 participated, where we provide them with wetsuits, and goggles. Five sessions were conducted. The kids at each session are divided into groups based on their abilities and the lessons are conducted by LtO's local 'Ocean Conservation Champions'. I assisted the

instructors with getting the kids ready and making sure they felt confident in the water and followed instructions. As it was a small pool, making sure the kids were not bumping into each other proved a challenge. Furthermore, the pool was freezing providing another challenge to stay focused on the tasks. Overall, the swimming lessons were a success.

As I reflect on these four weeks, the challenges, and opportunities I encountered allowed me to grow as an individual, leader and researcher. Working alongside other volunteers, each bringing their unique backgrounds and perspectives, improved our collaborative experience. Even after a long day of data collection, we maintained to stay positive and motivated atmosphere during data entry. We would openly discuss areas of development and contributed equally to the activities. Over time, we became accustomed with each other's strengths and weaknesses. Not only did we offer one another opportunities for improvement, such as conducting more difficult benthic surveys, but also to ensure everyone felt comfortable and was performing well in their assigned tasks, such as helping with species identification. We took the time to genuinely get to know one another, asking questions about each person's experiences and motivations. This allowed us to create a comfortable, open, and efficient work environment.

As LtO prioritizes empowering locals, delving into their projects, and working with their team highlighted the importance of bottom-up community led projects. Often research remains within the academic community, detached from real-world application. My LIA period highlighted the benefits disseminating and applying research can have on a small community and their surrounding environment. This has inspired me to shape my career in the field of ecology with a focus on knowledge and resource sharing, all while respecting and preserving the cultural integrity of the communities I work with.

Project Leader

Please comment on your scholar's LIA period, what you consider to be your scholar's strengths and which leadership attributes (please refer to the leadership attributes below) you feel your scholar has demonstrated and is particularly skilled in. You could also identify areas which the scholar can develop further.

I have had the pleasure to train and work with Nimna during a 4 week period in July of this year when she completed the Research Expedition here with us at Love the Oceans in Guinjata, Inhambane, Mozambique.

Nimna first of all is a very motivated happy individual that is keen to learn, adapts fast and exudes confidence and enthusiasm. When she encountered a problem or challenge during this period she would recognize it, talk about it to resolve it and then work on it to ensure she would improve and learn from the situation. My feedback was always taken on board and implemented well.

Nimna's leadership skills excel as she's got lots of initiative and drive. As a leader in her group she was responsible, enthusiastic, attentive and focused. You can really see her enjoying the training parts of her expedition duties like performing fish ID or conducting coral transect surveys.

As the program leader I found Nimna communicated well with people from any walk of life and that she has the skills to work with different people in different ways to ensure an efficient and productive working relationship. This is especially important when working in fieldwork as an researcher in a diverse work place.

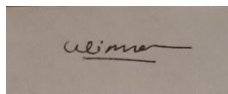
Her passion for marine conservation makes her a great role model and will inspire others to learn more about the ocean and how we can better use resources in Mozambique. Based on these experiences with Nimna and after seeing her skillfully complete the program I am confident she met the goals of her scholarship.

Please don't hesitate to contact me for any further information or any questions.

Kind regards,

Inés Costa | Program Coordinator | She/Her
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Love The Oceans | Non-profit marine conservation organisation
Winner of The Ocean Award, Young Initiative | Mission Blue Hope Spot |
Regenerative Impact Travel Awards Winner | Recently recognised as 1 of 15
global grassroots forces for change by the Duke and Duchess of Sussex

Signature of Scholar:

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Date: 04/10/2023

Signature of Project Leader

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Date: 23/10/2023

Leadership Attributes

Able to lead without authority

Able to convey purpose and build coalitions
Cultural intelligence and capacity for empathy
Honestly assess own knowledge/leadership style/preferences
Knows own limitations and acts accordingly
Learns continually
Speaks and writes clearly and confidently
Able to listen with understanding
Uses digital connectivity
Makes effective decisions in complex environments
Seeks out and fosters innovation and creativity
Strong intellectual ability
Turns ideas into action
Builds relationships and networks
Works collaboratively and across boundaries
Uses emotional intelligence to achieve this
Capitalises on the power of diversity
Able to navigate new and foreign situations
Uses this to build relationships and networks
Has energy and impact
Makes things happen
Able to analyse data and interpret results
Able to work and think independently
Prioritises activities and manages own time