



Internship Final Report

Due: On completion of all internship activities.

1. Title of internship: Marine conservation Intern
2. Host country, site location, and the dates of internship:
 - Host country: Vietnam
 - Site location: Hanoi (main office) and Nui Chua National Park, Ninh Thuan province
 - Dates of internship: 6 months, from November 2022 to April 2023
3. Names of any sponsoring institutions involved in the internship: The Fondation Segré
4. The overall aim summarised in 10–15 words: Assisting capacity building for stakeholders, research on local communities' background, support preparation for assessment of biodiversity.
5. Full name of intern: Huynh Thi Hue
6. Full name of Supervisor(s) and their affiliation: Nguyen Lam Thuy Ngan – Marine Coordination Officer and Hoang Van Lam – Country Director – Fauna & Flora Vietnam
7. Permanent contact address, email and website of the intern
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Executive Summary

The internship has obtained its goal to support the implementation of Fauna & Flora's marine conservation project in Nui Chua National Park (NCNP). Three of four objectives were achieved, which are supporting in organizing capacity building training for NCNP, supporting in approaching local communities and conducting socio-economic assessment research, and supporting in conducting research on the biodiversity and marine resources.

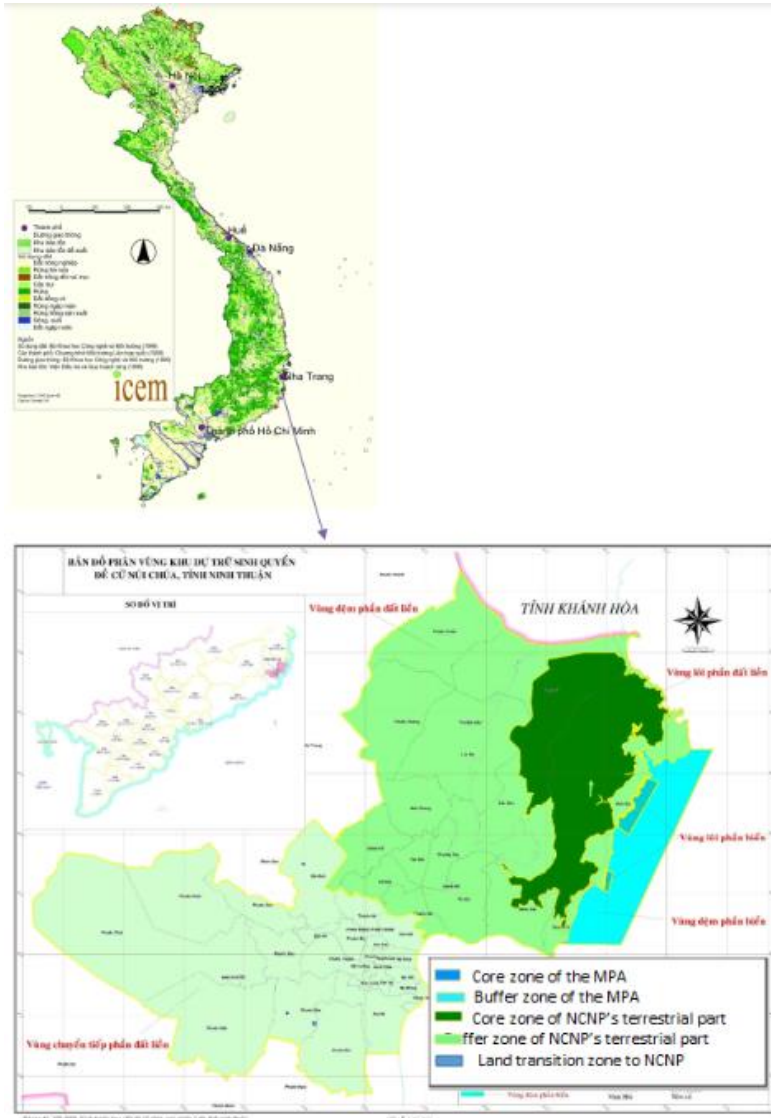
During the internship, I joined 04 field trips to NCNP to support logistical preparation and carried out multi-disciplined activities. I was made part of the survey team to conduct a socio-economic assessment in six fishing communities near the Marine Protected Area (MPA) to build relationships with the local communities and ensure the project has a solid socio-safeguarding foundation. A seaweed study has been carried out in Ninh Thuan to assess the value chain and biodiversity impacts of farming seaweed to find a suitable role in developing these high-potential sustainable livelihoods. The study has led to an experiment on restoration of the population of *Betaphycus gelatinus*, an endangered species in the MPA. Objective 3 – Support in promoting sustainable marine tourism practice, which was optional, was not completed due to the conflicting schedule of the marine project implementation and the internship duration.

Introduction

The internship took place under the first official marine project of Fauna & Flora Vietnam in NCNP, a new project site. The internship was designed to add extra support to the new marine team in carrying out the implementation of the project aiming to improve the capacity for marine resource management and coastal conservation. It was expected that Fauna & Flora would have the resource needed to build long-lasting relationships with local partners and communities via the internship, and subsequently open an office at the project site. At the same time, the internship was also planned to provide the experiences and skills needed for a young conservationist in a hand-on marine project.

NCNP is located in the Northeast of Ninh Thuan Province in the South Central of Vietnam, covering 22,513ha of terrestrial area and 7,352ha of marine area. This place has high biodiversity value with various habitats such as coral reef, mangrove, seagrass and seaweed and especially three sea turtle species coming for foraging or nesting. It is recorded that there are about 15-25 nests in NCNP every year of green turtle (*Chelonia mydas*), besides the infrequent presence of hawksbill (*Eretmochelys imbricata*) and loggerhead (*Caretta caretta*).

The key partner in the internship is NCNP, who has deeply understood the MPA and provided the existing problems in the management of MPA. NCNP provides suitable sites and suggests activities related to marine which I can participate in. The six coastal villages in the MPA, the main beneficiaries of the marine resources of the MPA, were also the key focus for the community-based conservation activities.

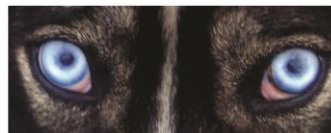


Map 01. Map of NCNP, in which the MPA is in turquoise

Aim and objectives

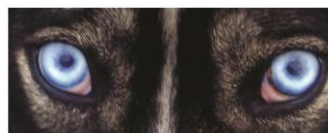
The internship was designed to help introduce Fauna & Flora's work and mission in the local communities, assist capacity building for stakeholders and research on the local communities' social background, and support the preparation for the assessments of the NCNP's marine biodiversity. There were activities organised to supporting the organisation of capacity training building courses for NCNP, supporting local community outreach and conducting socio-economic research, and supporting conducting research on biodiversity and marine resources. The last objective - assisting in promoting sustainable marine tourism practice - has yet to be fulfilled due to untimely schedule of the implementation of the project during the internship.

Activities and Methodology



There were six main activities I participated and conducted during the internship that mentioned in the table below with clear methodologies.

No.	The internship objectives	The internship activities	Methodologies
1	Supporting in local community outreach and conducting socio-economic research	<ul style="list-style-type: none"> - Conducted fisher communities survey in six villages near the MPA (199 survey answers obtained) - Created maps showing the local people's knowledge about MPA location and identify the fishing hot spots within MPA to support writing report (Detailed maps were attached in Appendices) 	<ul style="list-style-type: none"> - Support logistical preparation for field survey - Conducted in-depth interview using Survey123 application. - Recorded the results of meeting among local government officials, heads of village, and tourism business - Supported in clearing data - Learnt about QGIS - Created maps based on the collected data.
2	Supporting conducting research on the biodiversity and marine resources.	<ul style="list-style-type: none"> - Conducted seaweed study to assess value chain of seaweed in Ninh Thuan and impact on biodiversity of seaweed farming 	<ul style="list-style-type: none"> - Literature review, both English and Vietnamese - Practised taking note the important information of each document - Created workplan for seaweed study - Created a report frame - Consulted with specialists from FFI staff in the UK and Vietnam - Prepared questionnaires for farmers, intermediaries, producers and wild collectors. - Key informant interview, consisting of seaweed household farming, intermediaries, traders and local government (Agriculture Extension Center) - Met and consulted with experts of Institute of Oceanography (IO) and Nha Trang Institute of Technology Research and Application (NITRA) - Wrote report - Prepared Mission Terms of Reference (MToR) and Back Terms of Reference (BToR) for



			02 field trips to Nui Chua for the seaweed survey
3	Supporting conducting research on the biodiversity and marine resources.	- An experiment on the restoration of Hong Van seaweed (to be continued after the internship has been finished)	<ul style="list-style-type: none"> - Literature review on ecology consumption and farming of <i>Betaphycus gelatinus</i> - Consulted with experts of Institute of Oceanography (IO) and Nha Trang Institute of Technology Research and Application (NITRA) - Draft and illustrated Hong Van seaweed experiment plan in English - Contacted to local people to have seedlings - Prepared MToR and BToR, clear expenses of the trip
4	Supporting the organisation of capacity training building courses for NCNP	- Organized and participated in the beach clean-up at NCNP	<ul style="list-style-type: none"> - Prepared banner and materials for activity - Prepared MToR and BToR, clear expenses of the trip
5	Supporting conducting research on the biodiversity and marine resources.	- Improve nesting beaches conditions	<ul style="list-style-type: none"> - Prepared MToR and BToR, and necessary materials - Guided participants about types of debris that need to be collected - Recorded types of debris and the number of bags
6	Supporting conducting research on the biodiversity and marine resources.	- Turtle nest excavation and participating in beach patrol	<ul style="list-style-type: none"> - Translated presentation on turtle nesting monitoring - Practiced night patrol on turtle nest - Practiced nest excavation: Dug by hand, collected young turtles and released them to the sea. - Recorded the number of damaged eggs and dead turtles

Outputs and results

Within the frame of Fauna & Flora's Marine conservation project in Nui Chua, I provided logistical support in all field activities happening during the internship, namely:

- 01 community research: The socio-economic assessment

- 01 species conservation activity: Improving the turtle nesting beach condition
- 01 awareness raising activity: beach clean-up at Bai Chuoi beach with 17 volunteers
- 01 capacity training: diving training for 04 NCNP staff and 01 Fauna & Flora staff
- 02 field surveys on seaweed farming model and market

During the socio-economic assessment, the field survey was conducted in six villages with:

- 199 households participating and 40% of women interviewed
- 02 maps of people's perception of MPA's location and identify fishing hot spot in the MPA.
- 01 post-survey meeting with local government officials, heads of village, and tourism business was organized to inform the preliminary key findings. With NCNP being a new project site, Fauna & Flora team was introduced to such villages for the first time via the survey.
- 01 socio-economic report is being finalized, understanding the socio-economic status of local people living around MPA helps FFI plans for community-based conservation in NCNP such as sustainable livelihood training in 2023.

A special undertaking that was previously not within the framework of Fauna & Flora's current project in Nui Chua, and hence only made possible by the internship, was the seaweed study. It produced:

- 01 report on literature review of the seaweed farming model, and the value chain of seaweed market in Ninh Thuan, and the threat of unsustainable harvest of seaweeds.
- 01 on-going restoration experiment on *Betaphycus gelatinum*
- 02 new project ideas that are undergoing further investigation, including blue carbon for seaweed and seagrass in the MPA, and sustainable farming of the endangered *Betaphycus gelatinus*.

At the main office in Hanoi, I also supported various task needed for the project implementation:

- Procurement of various equipment needed for project implementation
- Design communication materials: 01 one-pager project information summary, FFI's logo banner for awareness raising activities

Achievements and impacts

Long- and short-term impacts

For short-term impacts, the internship programme helped introduce FFI to local people because this is the first year FFI organise conservation activities in Ninh Thuan. The Marine team has had full support in implementing activities in field as well as in the main office in Hanoi (mentioned above).



For long-term impacts, socio-economic survey and seaweed study provided necessary information to organise conservation activities based local communities in 2023-2024, especially sustainable livelihood trainings. A seaweed experiment is being implemented in NCNP to restore the population of *Betaphycus gelatinus*, an endangered species recorded in Decision 82/2008 NĐ-CP signed on 17/07/2008 regarding declaration of the list of endangered aquatic species in Vietnam which need protection, reproduction and development. This is one of activities to advance The Fondation Segré's mission. In potential consequence, this experiment is the first step towards commercial cultivation which will contribute to the socio-economic development of local communities.

Impact to the overall objective

Betaphycus gelatinus is one of the high-value seaweeds and specific species in the MPA, but they are facing overexploitation. Hence, seaweed study and Hong Van seaweed experiment are research on biodiversity and potential sustainable livelihood.

Effects of the internship on advancing my career

The internship has been an opportunity to open my understanding of conservation work. I realised that conservation does not only focus on a species but also on taking care of humans. I believe human is a key factor in conservation to minimize our impact on species and their habitat. This helped me understand that conservation also includes many different departments from accounting, finance, manager, communication, and research. Therefore, even though I have no conservation expertise, I can also undertake other activities to contribute to conservation. From that, my career is not focused on becoming a researcher as I think before. Besides, soft skills practiced via this internship, such as report writing, problem analysis, literature review, communication and presentation will help me have more opportunities to touch conservation jobs.

External influences and changes to internship

The main changes to the internship have been the finding from the seaweed study on the need for intervention to protect *Betaphycus gelatinus* fragile population. With available funding from the internship, the marine team has been able to design and conduct the restoration experiment.

Being supporting the marine project, I also had opportunities to participate in the Participatory Market System Development (PMSD) course. The knowledge of the PMSD was applied in the seaweed study about value chains in Ninh Thuan. Besides, I have supported other Project Managers in raising awareness of local people about the forest and specific species protection in Trung Khanh and Mu Cang Chai – Muong La, two mountainous project sites of Fauna & Flora Vietnam. I practiced speaking in front of crowds and discussing with villagers and other stakeholders.

Conclusion



The internship has succeeded in serving two mandatory and one optional objective in supporting the implementation of Fauna & Flora's marine project in Nui Chua National Park as planned in the proposal. Currently, the Hong Van seaweed experiment is being conducted. Besides continuing with the original project implementation plan, Fauna & Flora marine team will continue to explore the feasibility of seaweed and blue carbon to build sustainable finance for the MPA and its communities. With the support from the internship, Fauna & Flora has been able to build a strong relationship with the local partners. Fauna & Flora has opened a permanent site office in Nui Chua National Park, which is expected to help accelerate the speed of project implementation furthermore.

Moving on from this internship, I am first looking for another suitable position in conservation or sustainable development in other NGOs. Second, I have a plan to create a channel that provides conservation knowledge closely to children and young people alongside my main job. Finally, I expect a higher education in conservation and rural development in the next 2 years. And I think the skills gained from the internship period are necessary for the activities.

Acknowledgements

I acknowledge the financial support of Fondation Segré organisation in The Conservation Leadership Programme (CLP) at Fauna & Flora. I would like to thank Fauna & Flora – Vietnam programme that gave me a warm working environment and the colleagues who were willing to support, give advice and share essential knowledge. Special thanks to Marine Programme Coordinator – Nguyen Lam Thuy Ngan and our Country Director – Mr. Hoang Van Lam that have been of active guidance, help, and encouragement to me in order to complete the internship. I would also to thank Nui Chua National Park – the important partner in the internship programme that helped me a lot and has always been available if needed.

Appendices

1. Fisher community survey

The report is undergoing internal review within Fauna & Flora and hence it is not ready to be published.

2. [Two maps](#) of people's perception of MPA's location and fishing hot spot were created by QGIS
3. The [final report](#) of seaweed study
4. [The experiment on the culture of *Betaphycus gelatinus*](#)
5. [One-pager](#) summarising the marine project
6. The photos of activities



Figure 02: Socio-economic assessment interview a villager in My Hiep village



Figure 03: Removing ocean debris and large obstacles in the nesting beach of sea turtle



Figure 04: Seaweed field survey: splitting *Kappaphycus alvarezii* to increase quantity



Figure 05: Discussing with local people



Figure 06: Surveying seaweed products at a supermarket in Phan Rang – Thap Cham city



Figure 07: Gathering marine debris at Bai Chuoi beach in NCNP



Figure 08: Beach cleanup: Ocean debris was transferred from Bai Chuoi beach to the main road for collection of a waste disposal company



Figure 09: Nest excavation and hatchling releases to the sea

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