

Training in Coral Reef Restoration with Opportunity for Master's thesis in Seychelles (3 months)

Nature Seychelles, a leading environmental NGO in the Western Indian Ocean which is actively restoring coral reefs in the Cousin Island Special Reserve - a long term, no-take marine protected area - is offering a unique opportunity for volunteer scientific divers to assist with the implementation of a coral reef restoration project (<u>http://natureseychelles.org/what-we-do/coral-reef-restoration</u>) while conducting research. The successful candidate would play an important role in the 'Reef Rescuers' project, being involved in all aspects of our work whilst developing an array of transferable skills within the fields of marine conservation and coral reef restoration.

As part of the practice of coral reef restoration, the person will be provided with the unique opportunity to work with the Reef Rescuers' Science & Technical Field Officers in the daily running of the reef restoration project, including in-water and office-based work. The experience, skills and knowledge provided will typically include building, stocking and maintenance of in-situ coral nurseries, transplanting coral, a range of ecological monitoring (coral diversity, healthy conditions and growth, invertebrates and fish community assessment, etc...), data entry and analysis, dive store and equipment and knowledge management. On-the-job training will be provided on restoration techniques (dependent on seasonal activities), reef monitoring protocols and species identification.

This role is both physically and mentally demanding, therefore scientific divers must have a high level of physical fitness and be able to provide a relevant history of working underwater. Applicants with previous experience within reef restoration and/or coral reef ecological monitoring are desirable.

Skills and requirements

<u>Essential</u>

- An experienced, certified diver (ideally PADI Advanced Open Water or equivalent) capable of diving in challenging conditions (e.g., current, low visibility)
- o A minimum of 50 logged dives
- o Demonstrable experience of carrying out physical work underwater
- High physical fitness and ability to work in harsh conditions
- o Practical mind-set with the ability to solve problems underwater effectively



- \circ $\;$ Flexible to a varying work schedule and capable of living on a remote tropical island
- Effective communicator and English speaking
- Suitable diving and travel insurance
- Fish, coral and invertebrate species identification (ideally, Western Indian Ocean)

<u>Desirable</u>

- BSc/MSc in marine ecology or related subjects.
- Previous experience:
 - Coral reef restoration and/or tropical marine conservation & research
 - Coral reef ecological monitoring
 - Data management and scientific report writing
- Personal dive gear

Details

- Non-paid, voluntary position
- Duration: 3 months
- Accommodation provided. Shared dormitory, including kitchen and bathroom. No meals included.
- Flexible working hours but must be available 08:00-16:00 during weekdays, typically conducting up to two dives a day with the potential for weekend work depending on diving conditions
- <u>Base location</u>: Centre for Ocean Restoration Awareness Learning (CORAL), Praslin, Republic of Seychelles
- o Reporting to Reef Rescuers Science & Technical Field Officers

Thesis Opportunity

The role is also open for Master Thesis opportunities.

Available

Title: Effect of sea urchins grazing on *Sargassum* spp. in a coral restoration project within the Cousin Island Special Reserve, Seychelles.

Problem: The coral reef within the Cousin Island Special Reserve (CISR) has been severely affected by the latest coral bleaching events. An ecological shift has been triggered by a decrease in coral cover. *Sargassum* spp. is now taking over, covering the available substratum. This algal expansion is delaying the natural recovery and the effectiveness of the coral restoration effort.

Aim: To reintroduce farmed sea urchin within the CISR to reduce *Sargassum* spp. expansion. *Method:* Sea urchins will be transferred from the SFA (Seychelles Fishing Authority) facility on Mahé to Cousin and placed in targeted areas previously caged. Grazing rate and cage effect will be measured. The cleaned areas will be used for outplanting and long-term monitoring will be carried out.



Results: We expect to obtain a higher success of coral survival in areas with sea urchins.

The student will be involved in the experimental design phase, collection and entering of data, analysis of data and writing of a scientific paper.

An MoU for data sharing will be signed by the student and any internal supervisor or possible co-authors.

Other opportunities are available, upon discussion and approval from the Senior Scientific Officer.

Timeline Apply by: ASAP Start date: Early October 2024 End Date: December 2024/March2025 to be confirmed

To apply, please send (in english) a cover letter, CV, number of dives, date of last dive and digital photo by email with "Volunteer Scientific Diver - Master's Thesis" in the subject <u>line</u> to: <u>luca@natureseychelles.org</u> <u>sam@natureseychelles.org</u>

If shortlisted, you will be required to provide copies of both diving and insurance certificates and attend an online interview.