

IOI (Australia) and the Government of Samoa team up to implement Samoa's National Biodiversity Strategic Action Plan for marine invasive species.

A cooperation between IOI (Australia) and the Government of Samoa, Division of Environment & Conservation, Ministry of Natural Resources & Environment has resulted in the launching of invasive marine species surveys in Apia Harbour, Samoa. The project, funded by a grant from the United Nations Development Programme, will continue for the next twelve months.

Intensive field surveys were conducted, from February 5 - 15, and 11 sites around the Apia Harbour were surveyed by teams of divers and shore-based scientists. The survey team was led by Dr Posa A. Skelton, Director, IOI (Australia) who was assisted by six Ministry of Natural Resources and Environment staff. "This is the first ever survey for marine invasive species in Samoa" says Ms Malama Momoemausu, Principal Marine Conservation Officer, Division of Environment & Conservation and the project manager. The Government of Samoa has recognised the need for a comprehensive and concerted effort in documenting its biodiversity and conserving its marine ecosystems. Being a signatory to the Convention on Biological Diversity (CBD), the Government formulated the National Biodiversity Strategic Action Plan (NBSAP) in 2001.

Two of the NBSAP objectives are addressed in this project: 1) The survey of the inshore biodiversity (Theme 2: Objective 1.3); 2) The collection and identification of the fauna and flora (Theme 3: Objective 2.2). Invasive species are considered one of the greatest threats to the world's oceans, causing potentially serious economic and ecological losses. They are

transported across oceans on the hulls and in the ballasts of ocean-going vessels. Most do not survive the journey, whereas some become established and thrive when the conditions are ideal.



Snowflake coral (Carijoa riisei), an Atlantic Ocean introduction. Found as a fouling organism in Apia Harbour. Photo. P.A. Skelton.



Invasive species can compete with local species for food and space. “Given that the marine environment of most countries like Samoa is already stressed from coastal activities, the presence of invasive species threatens the livelihoods of the Samoan people. The cost of eliminating a single species would be prohibitively high and unaffordable to a small island state such as Samoa” Prof. Robin South, Project Advisor, says.

Identification of the more than 400 samples collected during the surveys will be facilitated by Pacific Island scientists at the University of the South Pacific in Fiji and IOI (Australia) in Townsville, Queensland, Australia.

One of the important and urgent reasons for this initiative is to assist the Government in the training of its personnel in biodiversity assessment and monitoring. Human resources constraints have often hindered sound policies as is the case with the NBSAP. Training of local staff was incorporated with the field surveys, and IOI (Australia) staff conducted a half-day course on identification of marine plants.



*Example of an introduced species in Samoa - Christmas tree hydroid, a native of the Caribbean.
Photo. P.A. Skelton*

This project will assist the Samoan Government in addressing the goals of its NBSAP by building on previous scientific research in species identification, and contributing data to the National Marine Biodiversity Database through the provision of identified voucher specimens. “A photo-library will be compiled from the more than 700 images taken in the field and laboratory” says Prof. South. “It will be produced in a CD-ROM format and will be used as a research and training resource for the Samoan Government.” he adds. Voucher specimens of representative flora and fauna will be placed in the Marine Collections at the University of the South Pacific in Suva, with duplicates lodged with the Division of Environment & Conservation in Samoa.

“We need more surveys of other parts of Samoa in order to meet the objectives of our National Biodiversity Strategic Action Plan, and I hope that this cooperation will continue in the future” concluded Malama Momoemausu.

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