Making waves for Vanuatu's coral reefs

by Sarah Graham*

AN American family of five has been travelling through the islands of Vanuatu for the past three month raising awareness and actively mitigating against the threat of the Crown of Thorns starfish currently affecting Vanuatu's reefs

Dr Janis Steele and Dr Brooks McCutchen, along with their three children Connor 19, Rowan 17 and Gavin 11, have been talking with communities, conducting coral reefs surveys and removing Crown of Thorns as they sail about the archipelago on their yacht Llyr.

The Steele-McCutchens operate a family agroforestry farm in the US where they produce maple syrup and focus on sustainable farming practices.

Half the year they live and work on the farm, and the other half of the year, they live and work aboard Llyr.

Since making a commitment five years ago to promote and support ocean conservation and sustainable livelihoods for island communities, they've had Vanuatu in their sights due to its rich cultural and biological diversity, and its geographic characteristics.

Their aim is to volunteer their sailing vessel and services to help local and regional projects in Vanuatu strengthen capacity for sustainable livelihoods and robust ecosystems.

Their sailing vessel is fully equipped with scuba diving and multimedia equipment as well as numerous educational materials concerning ocean and forest conservation. This has allowed the Steele-McCutchens to film and subsequently show many villages the current state of Vanuatu's coral reefs and also train and assist communities in remote and isolated locations to safely remove these pests from the ocean.

The Llyr crew has also been supporting the initiatives already taken by the Department of Fisheries which is currently working towards a national mitigation program on the Crown of Thorns.



An infestation of Crown of Thorns starfish feeding on a coral reef in the Amal and Crab Bay Conservation Area off Malekula.

Most recently, after hearing word of a large outbreak in Amal and Crab Bay Conservation Area at Malekula, the team met with the Fisheries research team and carried out an extensive operation under their guidance.

Over a period of four days, the Steele-McCutchens killed more than 3000 starfish that were located at depths inaccessible to snorkellers.

Their capacity to kill such large quantities of starfish in a short period of time would not have been possible without the five injection guns that they had on board, specifically selected to kill this coral-devouring species.

Working in close collaboration with Peter Whitelaw, secretary of the Vanuatu Scuba Operator's Association, the Steele-McCutchens researched and purchased this equipment prior to their expedition.

Using the methods developed by IRD and

Fisheries research team, each person was able to kill between 100-200 starfish within a single scuba dive with the use of a readily available natural chemical solution.

"We were overwhelmed by the sheer number of Crown of Thorns starfish when we initially arrived in Amal and Crab Bay Conservation Area, which were feeding on one of the most spectacular coral reef ecosystems in Vanuatu," said Dr Steele.

"By the following day, after revisiting the same site, the reef was scattered with starfish corpses, so we could see the work we had done had been effective."

The efforts of the Steele-McCutchen family come in addition to the work currently being carried out by other entities including New Zealand volunteers Anne and Eric Simmons and the conservation group Oceanswatch.

These groups are not only reporting all

outbreaks and sighting of Crown of Thorns starfish to the Department of Fisheries but are also actively involved in the removal of this invasive species from reefs as they travel

The Steele-McCutchens will continue their expedition to the Islands of Ambae, Ambrym, Pentecost, Epi and Emae before leaving for the United States in late September. They plan to return to Vanuatu in April next year.

For further information or to report any large number of Crown of Thorns starfish, contact Fisheries Officer Jayven on 5333340 or 23119. For cruising yachties tune in to the Vanuatu Radio Net each morning at 7.30am on USB frequency 8230 to report any sightings.

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Connor Steele-McCutchen injects a Crown of Thorns with a chemical solution to kill it and (right) Dr Brooks McCutchen collects a bag full of starfish.