

## Marine survey prioritises the Solomons' surprise bounty

An Australian-led survey team of local and international marine experts has confirmed that the Solomon Islands are a previously unknown extension to the 'Coral Triangle' – the region with the globe's highest diversity of corals – elevating the oceanic nation to a high priority for marine conservation.

In the first-ever comprehensive survey of the archipelago's habitat, scientists recorded corals and fish, as well as seagrasses, *Trochus* shell, beche-de-mer (sea cucumber), whales and dolphins. They revealed a stunningly high diversity of coral and fish life, with several new species found.

'The survey has shown that the region of the world's richest marine life, which was thought to extend from the waters of Indonesia into Papua New Guinea, extends even further into waters of the Solomon Islands,' said survey leader, Dr Alison Green, Marine Science Coordinator (Asia Pacific) for The Nature Conservancy.

'Before this survey, we knew almost nothing about the corals in the Solomon Islands. The survey team recorded 485 species of corals in the Solomon Islands with several species which are possibly new to science and more than 100 species of corals thousands of kilometres beyond their known range. This is one of the highest diversities of coral species on the planet,' said Dr Green. 'It is very exciting.'

'The survey has also revealed that the Solomon Islands is one of the 'big five' for coral-reef fish species and ranks with Indonesia, the Philippines, Australia and Papua New Guinea,' said Dr Green. The team recorded 931 species of fish in the Solomon Islands with 35 species that have only been recorded previously from other highly diverse regions such as Indonesia and New Guinea.

At a time when there is high concern over the decline of the world's reef ecosystems, there was some heartening news from the Solomons study. '... overall, the coral reefs of the Solomon Islands are in very good condition compared with other areas in the Indo-Pacific region,' Dr Green reported. 'Although human populations are rising, there is much less pressure on reefs of the Solomon Islands than on other areas, although we are concerned about the impacts of coral bleaching, land use and especially fishing



A young Russell Islander with a catch of white teatfish (sea cucumbers) that are dried and exported to China.

on reefs in the Solomon Islands.'

This immunity from modern impacts, however, seems somewhat fragile. The researchers found a noticeable absence of commercial species including sea cucumbers, tridacnid clams, *Trochus* shell, crayfish, large fish species and the exportable green snail *Turbo marmoratus*, indicating that overfishing was a widespread problem.

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Promisingly, the value of local conservation efforts was demonstrated around the Arnavon Islands. Since the 1980s, The Nature Conservancy has worked there with local communities and provincial governments to establish and maintain a thriving conservation zone (opened in 1992), where many key commercial species have re-established.

Mr Paul Lokani, Director of The Nature Conservancy's Melanesia Program which supported both the establishment of the marine conservation area and the regional assessment, said 'The survey is very important for people of the Solomon Islands. The majority of Solomon Island communities

depend on the natural marine resources for their livelihood and as a means of generating income. In many regions ... these resources are being put under mounting pressure as human populations rise, and individuals increasingly turn to the natural resources as a means of raising cash.'

'The survey will let us know which species are plentiful and which species are already over-fished. This information is vital for government agencies, non-government organisations and resource owners in assisting and focusing their efforts to develop and manage Solomon Islands' resources in a sustainable way.'

The five-week marine stocktake was a cooperative project by the Solomons Government, local and international conservation organisations (particularly The Nature Conservancy, World Wide Fund for Nature, Conservation International and Wildlife Conservation Society), and Australian scientific institutions including the Australian Institute of Marine Science, CRC Reef Research Centre, Queensland Department of Primary Industries & Fisheries, and APEX Environmental Pty Ltd.

**More information:**

[http://www.reef.crc.org.au/publications/newsletter/june04\\_coraltriangle.htm](http://www.reef.crc.org.au/publications/newsletter/june04_coraltriangle.htm)

**Contact:** Dr Alison Green (07) 4729 8490  
Louise Goggin, CRC Reef (07) 4729 8404