





Left from top: Staghorn corals, assorted coral species, and spinecheek anemone fish. Above: Shangri-La's Mactan Resort & Spa  
左上起：鹿角珊瑚、各類品種的珊瑚及小丑魚。上：宿霧香格里拉麥丹島酒店

“We determine what is in the area and whether it is representative of the whole sanctuary,” says Alfonso Amores, a plastic surgeon whose charitable foundation undertakes many community and education-based projects in the Philippines. “At different points, we count the number of invertebrates within three square metres, and how many fish there are in an area of three cubic metres. That will pretty much tell us the condition of the reef.”

He expresses the hope that, in five years, the sanctuary will once again be home to several hundred species of marine life. The recent reappearance of rarities such as the frogfish and pipefish, and the propagation of giant clams, shows there is every reason for optimism. The sanctuary is well on the way to becoming a model for other coral recovery programmes and a shining example of how to regenerate the underwater ecosystem.

One of the great things, Dr Amores says, is that the Philippines is blessed with warm tidal currents from the Pacific Ocean and the South China Sea. In the appropriate seasons, these bring the eggs and larvae of countless fish and other sea creatures into the Mactan channel. So, provided the “host” environment is sufficiently protected, a tremendous level of biodiversity may soon return. All it takes is to “just let them grow”.

To accelerate that process a little, Dr Amores says that serious thought is being given to sinking an old ship or a decommissioned aircraft within the confines of the sanctuary. While not strictly natural, this is a tactic approved by conservationists because it will provide an “anchor” for the establishment of new coral outcrops and, in turn, stimulate the recreation of all kinds of other marine life.

“Natural reef can take 20 to 30 years to seed and grow,” Dr Amores says. “But an artificial reef will get moving as soon as we sink the ship. We are looking hard for one now because it would be invaluable as a habitat and as an attraction for divers.”

## 海洋生命 彌足珍貴

藍陽天、浪淘沙、碧波藍灣—這裏是菲律賓中部的海島，是旅遊人士的渡假天堂。但是，大自然正向我們作出警號，它並不是取之不盡的，人類要懂得珍惜和愛護它。從前水底擠滿了珊瑚魚和絨絨海洋生物的美景已難再現，這悲果或多或少該歸咎於自稱萬物之靈的人類。

幸好，至少有一處海洋，不但沒有受到破壞，反而受到人類保護，全賴一群致力保護大自然的先鋒。香格里拉海洋保護區正式於去年九月成立。保護區達五公頃，設於宿霧的香格里拉麥丹島酒店前。首半年是保育期，不予開放，好讓珊瑚和魚類繁殖安居。現在已煥然一新，潛水人士能看到更多品種，像神仙、河豚、隆頭、小丑、獅子、藍倒吊和彩虹魚。當潛水人士漸漸適應了閃耀的陽光和水流後，更可看到蝦、海膽、海星、海參和海綿等等。這些都是宿霧的麥丹島最引人入勝的海洋生態，亦是保護珊瑚礁的豐盛成果。

香格里拉海洋保護區是在拉普拉普市委協助下建立，由指定的管理集團運作，包括自2006年參與珊瑚保育的香格里拉酒店、Scotty's 運動網絡、潛水中心以及Amores慈善基金。Scotty's安排義工處理水底工程、浮標、守護普通水域和每月清理沙灘，而酒店職員和住客亦熱心參與。Amores則負責制定概念，聯絡政府官員並跟進一些技術性的項目。Amores更開發了一套評估和管理珊瑚礁的系統用來追蹤變化和監察變化。評估方法是在特定區域內放置一條五十米的繩索，沿每半米的刻度檢取三項主要數據。最關注的當然是珊瑚礁的基質，系統會判斷珊瑚礁是否健康堅固、還是石化、沙化或受損，同時也會量度無脊椎動物、魚類和動物的數量。Alfonso Amores是一位整形外科醫生，他的慈善基金贊助了菲律賓許多社區和教育項目。他說：「這套系統讓我們判斷保護區內的生態，並了解這些生物在保護區內是否普遍，在不同量度點，我們可以計算出三平方米內的無脊椎動物和魚的數量，從而判斷珊瑚礁的健康情況。」他希望保護區能在五年內，再次孕育數以百計的海洋生物。最近罕見的琵琶魚、尖嘴魚和巨蚌等已重現這裏，成績實在令人鼓舞。香格里拉海洋保護區是重建海洋自然生態的成功例子，有望成為其他珊瑚礁重生計畫的模範。

Dr Amores提到，南海和太平洋的暖流都流向菲律賓，非常有利於孕育海洋生物。在某些季節，暖流會把魚卵、魚苗和其他海洋生物帶到麥丹海峽，所以只要好好保護他們的地方，便會回復昔日的多品種水平。而我們所要做的，就是讓他們自然成長。他正認真考慮是否要在保護區內放置沉船，或退役飛機以加速繁殖，雖然會有點兒違反自然，但環保學者亦認同這是可行的方法。沉船或飛機可讓新的珊瑚依附生長，並可孕育更多的海洋生物。「天然珊瑚礁最長需要二十至三十年才完全成長，但只要我們把沉船放到海底，人工珊瑚礁便會活動。我們現在正物色合適的沉船，打做一個珍貴的生物棲息處和美麗的潛水景點。」