

Current Status and Perspective of Marine Biodiversity of Taiping Island in the Spratlys, South China Sea

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ABSTRACT

Taiping Island is the largest island among the Spratlys. It is 1,289 m long, 366 m wide, and covers an area of approximately 0.49 km². Taiwan holds sovereignty over the island and the Coast Guard Administration has the main authority. In order to execute the “Assessment of the Feasibility of Establishing Taiping Island in Spratlys as Marine National Park Project,” the authors conducted underwater surveys and HDV recordings in June 2009 and March 2010. Each expedition lasted two days.

After the on-site surveys, 13 bird species, 3 seagrass species, 19 algae species, 267 coral species (including literature reviews), and 310 fish species were recorded. Some of these species were newly recorded. Moreover, Taiping Island and Chung-Chou Cay, about 3.1 nm to the east of Taiping, are important reproduction habitats for sea turtles and sea birds, and most coral reefs there are still in pristine condition. The live coral coverage on the fringe reefs of Taiping’s northern side even reached 100%, making the area highly valuable for research, education and conservation. However, the whole Spratly Islands are facing massive exploitation threats from neighboring countries from reef fish resource usage, mariculture, over-fishing, blast fishing and cyanide fishing. Hence, adequate management and conservation policies are urgently needed. We strongly recommend the government to take an active strategy to conserve and manage Taiping Island. It includes establishing research station, conducting intensive on-site survey, building database, and joining international collaboration and management projects of South China Sea. In addition, we recommend the Kaoshiung City Government to first set up Taiping Island as a No-Take area, just like Pratas Island previously. Then, the Ministry of the Interior can plan for the Nan-Sha Taiping Island Marine National Park. The Council of Agriculture can also consider designating Taiping Island as an important wildlife habitat for sea turtles, sea birds, and coral reef organisms. The long-term plan for the future will be to establish a Nan-Sha International Marine Peace Park.

南中國海南沙太平島海洋生物多樣性之現況及展望

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摘要

太平島是南沙群島最大島，全長 1289m，寬 366m，面積 0.49 km²，目前屬於我國固有之領土，有海巡人員駐守。作者等為執行內政部所委託之「南沙太平島國家公園可行性評估」計畫，乃於 2009 年 6 月登島現勘，並於 2010 年 3 月進行海底高畫質攝錄影。在各一次两天的調查期間，共記錄到鳥類 13 種，海草 3 種，固著性大型藻類 19 種，珊瑚 267 種(含文獻整理)，魚類 310 種，各類群都有不少新紀錄種。太平島及島東方 3.1 哩處之中州礁目前不但仍是海龜、海鳥的重要繁殖棲息地，且大部份珊瑚礁區之生態狀況仍保持相當原始狀態，太平島北方之礁緣斜坡處，珊瑚之覆蓋率甚至達百分百，不論在研究、教育與保育方面之價值均甚高。但太平島周遭海域目前仍面臨鄰國擬開發當地珊瑚礁魚類、淺海養殖，以及毒魚及炸魚的威脅，亟需擬定管理及保育之政策並付諸實施。故我們建議政府應對南沙太平島的保育及經營管理採取較積極之作為。包括設立研究站，積極進行調查研究，建立資料庫，並參與南海之國際合作研究及管理計畫。此外，建議高雄市政府可比照以往東沙島先將太平島劃設為禁漁區，再由內政部規劃成立南沙太平島海洋國家公園，農委會亦可研議劃設為海龜、海鳥及珊瑚礁生物之野生動物重要棲息地，未來則朝建立南沙海洋和平公園的目標來努力。