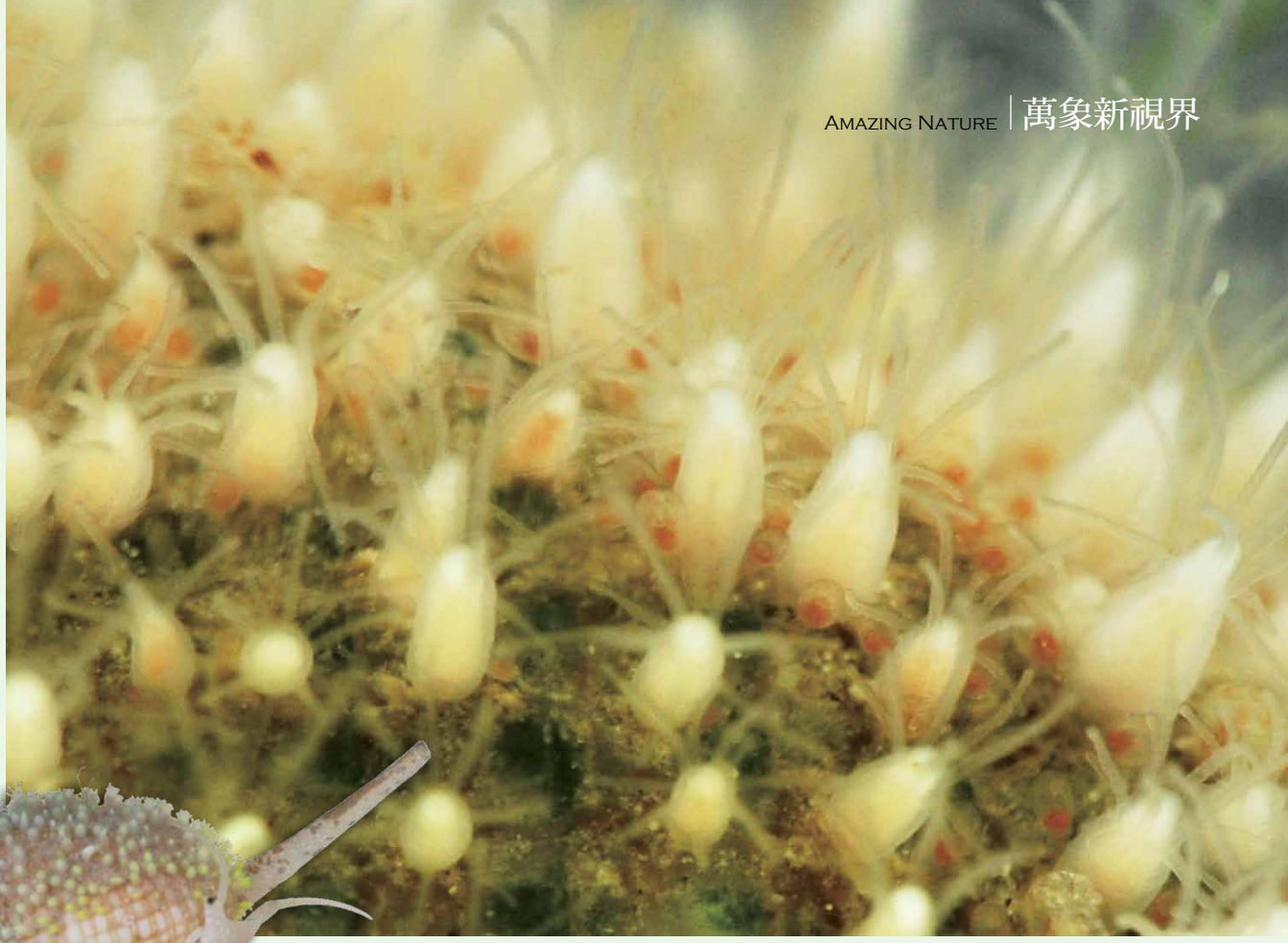

穿羽毛衣的遁地者

Ninjas Dressed with Feathers

圖 & 文提供 / 高雄醫學大學生物醫學暨環境生物學系 邱郁文助理教授
Photo & Text/ Asst. Prof. Yuh-wen Chiu of the Faculty of Biomedical Science and Environmental Biology, Kaohsiung Medical Univ.

在東沙的島礁內潟湖的沙底，住著一群活動迅速的沙底忍者——織紋螺，其中以黑頂織紋螺為主要代表。潛遁在沙中的黑頂織紋螺，由水中的氣味偵查到附近有食物出現，就會由沙底爬出，快速的靠近目標，然後伸出長條狀的吻，用吻前端的齒舌刮下食物。故在一個完整健康的生態環境中，織紋螺族群不會讓任何動物的屍體停留在底質太久，他們會在短時間內動員清除大隊，把這些「珍饈」搬得一乾二淨，在整個生態系統中扮演著碎屑者的角色，維持生態系統的物質循環。

東沙內潟湖的黑頂織紋螺還有一個有趣的現象，就是部分個體的外殼上，會有刺胞水母屬的水螅蟲群體共生而包覆整個織紋螺的外殼，讓織紋螺外觀像是穿上一袍羽毛衣，部分水螅水母還會發出綠色螢光，依附在黑頂織紋螺行光合作用。目前全世界僅在日本鹿兒島與印尼的蘇拉維西北部有相關紀錄。這種特殊現象顯示東沙環礁保留了原始、不受污染的環境。

Under the sand at the bottom of the lagoon in Dongsha Island live a group of agile Ninjas —— the Nassariidaes —— led by Nassarius albescens as the most representative among all, which detect the smell of their food and creep out from under the sand and draw near their prey in haste. They eat by sticking out their long siphonal notch and scraping the food off with their redula at the tip of their notch. In a healthy ecosystem, the Nassariidaes will not leave the corpses of any animals unattended for too long, but mobilize to clean up these “tasty delicacies” in no time, keeping a balanced cycle of ecosystem by playing the role of scavengers.

Another intriguing sight of Nassarius albescens is their feather-like coating, formed by the parabiosis of hydrozoans (Genus Cytaeis), on the surface of their shells. Some hydrozoans would give off a green fluorescent glimmer while performing photosynthesis on the snails. Such activities are only reported in Kagoshima in Japan (Cytaeis sp.) and northern Sulawesi in Indonesia (Cytaeis capitata) around the world, a solid proof of the pristine and unpolluted environment of Dongsha Atoll.