

## 彰化海岸地區潮間帶之生態調查與評估

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**摘要** 本研究調查彰化海岸潮間帶棲地的生態狀況，調查對象以潮間帶大型底棲無脊椎動物為主。利用生物群聚指數、底棲生物整合指數及棲地評價程序等生態評估方法建立彰化海岸潮間帶棲地適宜度指數之生態評估模式。此生態評估模式可提供科學量化之棲地生態「健康」資訊，可反應生態環境主要受何種環境因子所影響。本研究調查潮間帶底棲生物種類共有 70 種，其中僅有圍沙蠶 (*Perinereis* sp.) 一種多毛類，短指和尚蟹 (*Mictyris brevidactylus*) 位居數量之冠。根據本研究之 HSI 模式結果，顯示 H 點 (二林溪口南岸) 的潮間帶生態狀況明顯劣於其他調查點，並不適合大部分的底棲生物棲息。實務上本研究之調查結果可作為相關單位進行彰化海岸生態復育及棲地營造規劃之重要參考資料。

**關鍵詞**：彰化海岸、生態評估、潮間帶、棲地適宜度指數。

### An Investigation and Ecological Evaluation of the Intertidal Zones of Changhua Coast

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**ABSTRACT** This study investigated the benthic ecology to understand the ecological condition of the intertidal zones of Changhua coast. The major investigative target was macrobenthos. The study applied the methods of the biological diversity index, Benthic Index of Biotic Integrity (B-IBI), and Habitat Evaluation Procedure (HEP) to establish the Habitat Suitability Index (HSI) for ecological evaluation model used for the intertidal zones of Changhua coast. The ecological evaluation model can be used to provide quantitative “healthy” information about the habitats and to reflect the influence factors of the ecological environment. There are seventy species of macrobenthos in this investigation. The only species of Polychaeta we found was *Perinereis* sp., and the largest-population specie was *Mictyris brevidactylus*. According to the result of the HSI model, the habitat in station H, at the south bank of Erlin River Estuary, is the poorest compared with other stations, and the area is not suitable for most macrobenthos. This investigation results can be an important reference for the government to organize the conservation works for the coast ecology and habitat establishment.

**Key Words:** Changhua coast, ecological evaluation, intertidal zones, habitat suitability index (HSI).

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