

**Researcher
of the Month**

St. John's Island

National Marine Laboratory

Wednesday, 21st February 2018 | 3pm | SJINML seminar room

Dr. Colin (Kuo Chang) Wen (Visiting scientist)

Dr. Wen is currently working in Tunhai University, Taiwan, teaching marine biology, ichthyology, and coral reef-related topics. His research interests lie in marine reserves and human-reef conflicts from coastal development and tourism. Dr. Wen received his PhD from James Cook University, Australia, in ecological behaviour and habitat preference of coral trout recruitment. He aspires to develop reef management guidelines balancing marine resource utilisation and marine conservation.

Abstract

Human disturbance on coral reef fishes in Taiwanese waters: From community to behaviour.

Coral reef fishes are the most dominant vertebrates in a coral reef ecosystem. They play important functional roles in ecosystem resilience and resistance, and are major commercial species in coastal fisheries. In Taiwan, coral reef fishes have been overexploited for decades, but there is no quantitative evidence to inform the government and to suggest a possible solution. Most reefs experience recruitment overfishing and reserve status does not affect fish abundance or body length. Conversely, more and larger fish were found on reefs where there is fish-feeding tourism. Widely believed to have negative ecological impacts, upon examining the effect of fish-feeding activity on the response and foraging behaviour of fish, we found that while fish display reduced wariness of divers, they do not totally alter their algal feeding behavior, suggesting that the ecological impact of fish-feeding may not be as severe as previously thought. We suggest that a well-managed fish-feeding tourism could serve as an alternative to marine reserves while providing a venue for coral reef conservation education.