## MAINTAINING NATIVE LEVELS OF SHALLOW-WATER HOLOTHURIAN BIODIVERSITY IN THE WESTERN INDIAN OCEAN

Samyn Yves and Ward Appeltans

Unit of Ecology and Systematics, Free University of Brussels (VUB), Pleinlaan 2, B-1050 Brussels, Belgium

E-mail: ysamyn@vub.ac.be

In East Africa, holothurian populations are currently reaching depletion due to extensive harvesting for the bêche-de-mer industry in the Far East. However, to date, conservation and management of this fauna in an ecosystem approach is currently hardly feasible, for the simple reason that we still fail to name the different players in the game, let alone to monitor the interactions between these or yet other players in the ecosystem.

We strongly believe that taxonomic accuracy sets the key to understanding both history and future of holothurian biodiversity, and that only such an approach will result in unambiguous hypotheses of species richness in the different parts of the western Indian Ocean. Our attempts reveal that several flaws in the taxonomy persistently obstructed a clear understanding of holothurian biodiversity. The present study compares the poorly investigated East African situation to the better studied South East African one and stresses that an ecosystem approach is difficult to attain before the taxonomy has reached sufficient stability.