

Short communication:

IMPACT OF THE 2004 TSUNAMI ON INTERTIDAL SEDIMENT AND ROCKY SHORE ASSEMBLAGES IN RANONG AND PHANGNGA PROVINCES, THAILAND

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ABSTRACT: Initial results of a survey comparing pre- and post-tsunami effects on the intertidal sediment habitats of Ranong and northern Phang Nga are presented. Analyses of sediment and faunal composition of four sandy shores indicate that there has been a change in the sediment granulometric composition and its distribution with depth. At most sites there was an increase in the coarse fractions, often with increased shell debris and distinct layering of fine and coarse material. While the overall pattern was the same for all the beaches, there were differences in the patterns of sediment deposition. Impact on the fauna was decidedly less marked with the partial re-establishment of pre-tsunami patterns four months after the event. There is some evidence that the abundance of some species was lower than previously but body size suggested recent colonisation had taken place. Other elements of the fauna, particularly those which burrow deeply, appear to have survived the impact and have re-established themselves. Rocky habitats were also affected, with boulders and rocks being moved and up-turned. This disturbance appears to have led to loss of certain patch forming species. Serpulid worms and other underboulder species died when boulders have were turned over. In some areas barnacles were mothered by fine sediment; yet in some places there were signs of settlement of small barnacle spat (*Chthamalus malayensis*). In contrast, sheltered mud flats and seagrass beds appear untouched.
