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AN INITIAL INVESTIGATION INTO THE MAPPING OF SEAGRASS AND WATER COLOR WITH CZCS AND LANDSAT IN NORTH QUEENSLAND, AUSTRALIA

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ABSTRACT

A pilot study was carried out to define the extent to which Coastal Zone Color Scanner (CZCS) data together with the finer spatial resolution of Landsat MSS data could map nearshore sea-bottom, benthos, and water color features of the northern Great Barrier Reef Region. CZCS and Landsat images were classified and labelled. Results were verified by limited field work. These showed that subject to local conditions the technique could identify and map concentrations of high percentage cover submerged aquatic vegetation and water color within nearshore areas of the Great Barrier Reef Region. Discrimination of sub-surface features was hampered by the coarse spatial resolution of the CZCS and the poorer spectral range of Landsat. Although the techniques investigated were operationally useful, the higher spectral and spatial resolution of Landsat Thematic Mapper data will provide an effective tool for this work.

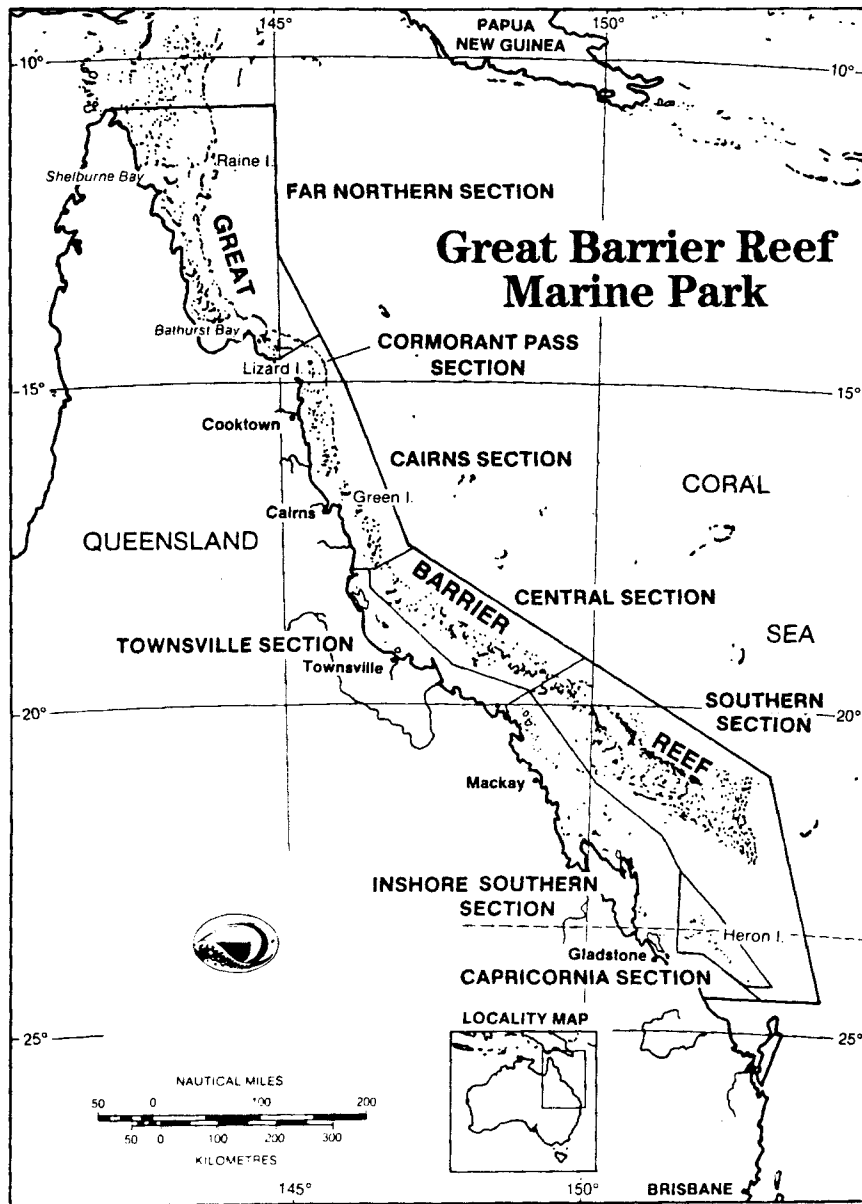


Figure 1: Location - Great Barrier Reef Marine Park, Queensland, Australia