METHODS

Field work for this survey was carried out on 23–24 January 1997 about 10 months after the 1996 flood episode. Although the 1997 wet season had been underway since late December 1996 the Daintree catchment had not received any 24-hour totals of more than 100 millimetres in that time and the river had not experienced even minor flooding (A.M. Ayling personal observations and unpublished data).

The same survey methods used in 1995 were employed for this survey. Surveys were confined to the shallow reef slope in depths between about two to three metres below low tide level. A length of this stratum of about 60 metres comprised each site and five 20-metre line intersect transects were run approximately parallel to the reef edge within this area. Length of intersect in centimetres was recorded for all encrusting organisms beneath each transect line. Four sites were selected approximately equally spaced along the north face of Snapper Island, and four more, similarly spaced, were surveyed on the south face. Two of the sites on each face were in a similar location to those surveyed in 1995. On Black Rocks the same two sites used in 1995 were resurveyed.

At one of the south Snapper Island sites five additional transects were surveyed in a depth strata five to six metres below low tide level to see if there was any depth effect in the flood plume impact.

All transect data were summarised in spreadsheet form, and ANOVA techniques were used to make comparisons. Three comparisons were made:

1. A comparison of the south face and the north face of Snapper Island with four sites on each face. Location was regarded as fixed and site as random.

2. A comparison of coral cover at two sites in each location (south Snapper Island, north Snapper Island, Black Rocks) between 1995 and 1997. For this analysis location was regarded as fixed, and site and time as random.

3. A depth comparison for shallow and deep strata on the south face of Snapper Island. Depth was a fixed factor.