

## 5. DISCUSSION

Several bases for this nomenclature were considered. They were as follows:

1. field verification by author to determine the appropriateness of each name for a feature;
2. a survey amongst experienced GBR field scientists asking them to nominate the most appropriate name for a feature; and
3. a literature survey of term usage.

The first and second of the above options proved unsuitable for one or more of the following reasons; logistically difficult, outside the time constraints of the BRIAN project, or individual bias.

In any communication there is a transfer of information. Some of the criteria advocated to indicate the effectiveness of the communication are agreement, accuracy and understanding (Shepherdson, 1982). Examination of the variations in reef terms used, the frequency of use data, and the context of use of a reef term given in Figures 4 and 5, indicate there must be some agreement whether actual and/or perceived among GBR scientists on these variations. For example, the terms 'reef front' and 'reef slope' were used in 28 and 19 publications respectively (Figure 4) to label the same reef feature. Shepherdson (1982) states that 'some writers imply that high agreement is an indicator of effective communication; but accuracy, rather than agreement, is a better indicator'.

Accuracy in the emission and/or reception of coral reef information among scientists cannot be ascertained from the literature, but the frequency of use (Figure 4) and the context of use (Figure 5) data give some indication of the level of agreement. An examination of Figures 4 and 5 shows the lack of any general level of agreement, as the level varies for nearly every coral reef term. However, a pattern in the level of agreement for some coral reef terms is evident.

Scientists have a high agreement or consensus, on both the term and its meaning for 'reef flat', 'lagoon', 'beach', 'sand spit', 'vegetation', and 'beachrock'. In comparison, there is a low agreement or dissensus, on the term and high agreement on the meaning for 'reef flat', 'reef rim', and 'reef slope'.

The most frequently used term was 'reef flat', for which a consensus on its meaning but a dissensus on the term exists (for example; 'the flat', 'leeward flat', 'coral flat', 'coral reef flat', 'planar reef top', 'inshore reef flat', to list but a few of the terms used) (Figure 4). The least frequently used terms were those where only one author used the term within the 240 literature circulations. For example, the term 'prong and buttress formation in back-reef zone' (Figure 4) - Thom and Chappel, 1978; and, the term 'algal platform' - Veron and Hudson, 1978. The communication process is hindered here by the lack of any concise definition and by its uncommon adoption by scientists. For example, a definition for the term 'breastwork' used by the Stoddart, McLean, Scoffin and Gibbs (1978) cannot be derived from its context of use:

The edge of the mangrove itself is lined by a largely symmetrical breastwork of white shingle, overlapping the landward edges of the old inner rampart.

(Figure 5, entry no. 11)

From the literature surveyed, it is evident that scientists have concentrated on reefs situated in the GBR region between the outer Ribbon Reefs (Maxwell, 1968) and the Queensland coast, and in the region between the Queensland coastal towns of Cooktown in the north and Maryborough in the south. Therefore, two regions of the GBR have been neglected, the reefs north of Cooktown and the Ribbon Reefs of the outer barrier. Hence this study is only capable of representing reef features to the extent to which terms are used in the literature.