

reflect the first trend of substratum texture mentioned and, to a far more limited degree, the second. By analogy with Figure 6 we might reasonably expect (a) different species to characterise the low tide levels of each transect, and (b) species characteristic of the lowest level of Transect C would be found at a higher level at Transect B, and at a higher level (if at all) at Transect A. Unfortunately, expectation (a) involves a progression that coincides with the possible progression (mentioned above) in development of a climax community and so cannot prove one rather than the other hypothesis. (Comparison of Figures 3A, 4A and 5A shows that some progression of species at lowest transect levels does exist, e.g., *Lumbrineris*, *Nerine*, *Abarenicola*, *Callianassa*, amphipods). So far as expectation (b) is concerned, it may be supported by the upward movement of *Scolecoclepidus benhami* in Transect A relative to Transect B (and it does seem that this little worm favours the presence of considerable quantities of very coarse sand) but this distribution cannot, even considered with the distribution of *Allorchestes*, be regarded as fully matching expectation (b). It is therefore unresolved whether the observed faunal distribution is indicative of maturing community-succession or that it is correlated with substratum texture. The progressive upward extension of certain species with increasing shelter is a phenomenon that lends no weight to expectation (b) since these species are most abundant at lowest levels, i.e., favour low tide level rather than a particular texture.

However, the rise of the species of the lower intertidal fauna up the beach with increasing shelter is a most notable contrast to the well-known phenomenon of biota rising up the rocky littoral under the influence of increased exposure to wave action.

The lower intertidal fauna is obviously an extension of species that habituate the shallow infratidal. It is rather sparse in variety in Gooch's Beach but certain species may be numerous in the most sheltered places. The dominance of polychaetes has been mentioned and in conclusion this beach lacks *Zostera*, bivalves and crabs, presumably because it is too exposed and too unstable.

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