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The type of living resources [in the tropics] and the data base on these resources were characterized in general terms, and the features discussed in detail which are related to recruitment processes and their study.

Lack of time was identified as a major constraint. More precisely, the problem is (a) lack of time to study thoroughly all the species that are relevant; (b) lack of time series of recruitment indices long enough for successful application of standard correlation methods and (c) a general tendency for biological events, in tropical waters to occur within a compressed time scale. This compressed time scale requires a scaling down of all time-related components of the methodology generally used for recruitment studies (this scaling-down may not be always possible to perform, however).

Data which are widely available in tropical countries, for which longer time-series are often accessible (in the appropriate time scale) are (a) length-frequency data from commercial fish stocks and (b) meteorological information (particularly wind data). Other type of data usable for inferences on recruitment processes are generally unavailable, and/or hard to generate.

Methods have been developed in recent years which allow inference on recruitment variability of tropical fishes. Such methods are best represented by (a) the ELEFAN (*E*lectronic *LE*ngth *F*requency *AN*alysis) suite of microcomputer programmes for the detailed, objective analysis of length-frequency data, as developed by the author and his associates and (b) the "wind"-based comparative method of A. Bakun and co-workers at the Pacific Environmental Group (NMFS, Monterey), which itself has its theoretical basis in the work of R. Lasker and associates at the Southwest Fisheries Center (NMFS, La Jolla).

When no detailed catch data are available, the integration of the approaches mentioned above involves the following steps:

i) estimation of growth parameters (including those describing seasonal growth oscillations) from the length-frequency data using ELEFAN I;
ii) derivation of so-called "recruitment patterns" using ELEFAN II (this process involves the projection onto the time axis of the available length-frequency data by means of the growth parameters derived in (i), thus making subannual or annual recruitment "pulses" visible, quantifiable and amenable to further analysis and
iii) interpretation of the combined recruitment pulses of group of species by means of plots of turbulence on Eckman transport, as proposed by Bakun and co-workers in the narrower context of single species in upwelling ecosystems.

When monthly catch data are available for a period for which matching length frequency data are also available, conversion to monthly catch-at-length data can be easily performed; such data can then be used with the ELEFAN III programme to run age-structured Virtual Population Analyses, which yields estimates of absolute monthly recruitment.

Such estimates of monthly recruitment can be used (after accounting for seasonality) for deriving standard stock-recruitment relationships or for such approaches as spectral or multivariate analysis. ELEFAN III and the *monthly* recruitment estimates in general thus allow for the application to the recruitment problem of extremely powerful methods; such methods had earlier not been available for recruitment studies because of the lack of sufficient degrees of freedom (the "one-point-per-year" problem).

It is this last aspect of the methodology proposed here which seems the most promising.