

INTRODUCTION

Most of our understanding of freshwater zooplankton ecology, lifecycles and production is derived from work on temperate zooplankton populations. Surprisingly few studies describe in detail, the population dynamics of subtropical and tropical zooplankton population dynamics; Burgis (1971) in Lake George, Uganda, Wyngaard (1978) in Florida and Gophen (1978) in Lake Kinneret, Israel.

The conclusion appears to be that in climates that have no clearly defined seasonal cycle, zooplankton life history strategies, lifecycles, behaviour and composition differ markedly from those of temperate zooplankton.

Climates that have a relatively restricted temperature range seem to favour the dominance of copepods over cladoceran species (Wyngaard, 1978) and furthermore, of a single copepod species over others (Pennak, 1957). It also appears that the reproductive efforts of tropical zooplankton may, because of fewer natural constraints, exceed those of temperate zooplankton. Some of the available literature on zooplankton lifecycles (Taylor and Slatkin, 1981; Wyngaard et al, 1982) describes a strong correlation between high temperature and short lifecycles. Diapause (the over wintering or dormant stage) does not occur in most tropical zooplankton.

It has been suggested that tropical species, as they are often multi-voltine and are less limited by nutrient availability, tend to have higher production rates than temperate zooplankton (Gophen, 1978).

This study attempts to measure the population parameters and estimate