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The cuttlefish *Sepia officinalis* a working model in cephalopod research

Preface

Fifteen years after the publication of "La seiche – The cuttlefish" (E. Boucaud-Camou ed., 1991*), a new survey attempting to cover more recent work is needed. The common cuttlefish *Sepia officinalis* Linnaeus, 1758 has been thoroughly studied under natural and laboratory conditions throughout its life cycle. The large hatchlings are bottom-living and can be easily reared to the adult stage in any aquarium providing unpolluted sea water and a sufficient supply of appropriate food. Thus, individuals can be studied under entirely controlled conditions throughout their post-hatching life, up to and including reproduction. This allows one to establish experimental populations for both laboratory and field work. In particular aquaculture and fishery biology now work in concert using various rearing techniques. Insight gained in any of these applications can be of interest to fundamental studies – benefiting a large scope of fishery and nursery sciences. Present research topics range from ecology, physiology and ethology, developmental biology, to functional morphology and evolutionary biology.

The fourteen articles assembled in this volume do not fully cover all these topics, but provide a fairly broad overview of recent and ongoing research concerning cuttlefish. Through their respective bibliographies, these articles will draw attention to related work on *S. officinalis* and research on other sepiid species.

By highlighting *Sepia officinalis* as a 'working model in cephalopod research', we do not intend to suggest that this species allows one to address *all* questions raised in cephalopod biology. For example, cuttlefish do not provide much information regarding the peculiar features of pelagic squids or deep-sea octopods. However, significance of some features characterizing such apparently remote groups may be assessed more precisely if we compare them with characteristics of the common cuttlefish – an inshore 'generalist' combining some ancestral features (e. g. a chambered shell) with very advanced performance relating to sensory systems and behaviour. Thus, comparative aspects are continually of interest to both the specialists studying cuttlefish and those interested in the biology, morphology, behaviour, ecology and systematics of other cephalopods. Clearly this double promise is also meaningful for studies in cephalopod paleontology focusing on paleobiological issues.

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* Boucaud-Camou E. ed. (1991). La seiche – The cuttlefish. Actes du Premier symposium international sur la seiche (Caen, 1-3 juin 1989). Centre de publications de l'Université de Caen, 358 pp.

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