

Direct methods in age and growth studies of cephalopods

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An overview of all known increment-bearing structures and ageing techniques employed worldwide in cephalopods including octopus, cuttlefish and squid is presented. The discovery of daily growth increments in squid statoliths and development of the innovative ageing techniques overturned previous assumptions about cephalopod age, growth and metabolism. It showed that the majority of recent coleoid cephalopods live in the 'fast lane', growing rapidly and completing their life cycles in a one-two years or less. Surprisingly, these seemingly excellent perspectives to study age and growth in cephalopods have not gained much momentum. Only one eighth of more than 300 squid species have their basic age assessed and described, with no more than a dozen of octopod and sepiid species. Some species have their growth estimates with on-going arguments about the shape of their growth curves. Major problems encountered during age and growth studies of cephalopods are outlined and possible ways to improve the techniques and apply them to a wider spectrum of species are suggested.

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