

## Eledone cirrhosa and SPICrT or why it is not easy to assess a short lived cephalopod species.

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Although some cephalopods have had always commercial value and others started to increase it in the last years, they are not scientific assessed like other European Atlantic stocks and they do not have specific management measures, with the exception of some regional harvest control rules for artisanal fleets. Among these species that have been gaining importance in landings is the horned octopus *Eledone cirrhosa*. This octopus represents an important bycatch in the catches of several North Spanish otter trawl fisheries, in landings but also in discards. Like other cephalopods, *E. cirrhosa* is a short-lived and fast growing species, and previous studies showed that its abundance is related to physical and environmental conditions.

As a first step towards its possible inclusion in the ICES annual assessment system, a first assessment model for this and other species has been tested in the cephalopod working group (WGCEPH). The chosen model was SPICrT (Surplus Production model in Continuous Time). Using landings and two abundance indices (a commercial fleet and a scientific bottom trawl survey), first results could be studied. With the selected fit, convergence was obtained and residuals and diagnostics were acceptable. However, confidence intervals were very huge, suggesting improvements in the model are needed. Further work, like testing other assessment model or selecting other tuning indices, will help in the assessment process of this species.