

The Relevance and applicability of current regulations for the spiny lobster fishery in the south coast of Sri Lanka

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Abstract

Length/weight frequencies in different species of lobster and catch information were collected during the period 2001 to 2004 from lobster companies and lobster landing sites located on the south coast of Sri Lanka, and analyzed in order to update knowledge on the current status of this industry. A rapid assessment was carried out from April to May 2006 to evaluate the applicability of the existing minimum legal limit. The study found that between 36% and 45% of the daily catch consisted of undersized animals with less than 6 cm carapace length (CL). Although harvesting of berried females was prohibited, they were found in the catches throughout the lobster fishing season, with the highest proportion (47%) being recorded during September to January. Carapace length at the onset of sexual maturity for *Panulirus versicolor*, *P. penicillatus*, *P. homarus* and *P. longipes* were determined as 6.0 cm, 5.2 cm, 4.0 cm and 3.4 cm, respectively. It became clear that the present minimum legal limit (6 cm CL), does not allow *P. penicillatus* and *P. versicolor* to attain to 50% maturity level and is a result of all lobster species (except *P. ornatus*) being covered by a common set of regulations. Moreover, an increasing trend of harvesting undersized lobsters was recorded during the study period. The highest proportion (36%) of undersized lobsters in the catch was recorded during August to October. When the occurrence of berried females and the high proportion of undersized lobsters in commercial catches are considered, it would be more appropriate to declare the period September to October as the closed season for the spiny lobster fishery in the Southern coast, instead of the present practice of having two separate closed months (February and September).

Keywords: carapace length, closed season, minimum legal size, size at onset of maturity

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