

Strategic Research Theme : Natural Resources and Sustainability

Research Project undertaken within the **Centre for Marine and Freshwater Research**

Project Title: Implementation of a Logbook System for Crawfish and Collection of Growth and Recruitment Data

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Project Summary

Implementation of a logbook system for crawfish *Palinurus elephas*, and the collection of growth and recruitment data. Most stocks of *Palinurus* in Ireland are either assumed to be collapsed, depleted or in the early stages of recovery, but due to lack of historical catch and effort data, or any formal assessments it is almost impossible to properly determine their status. There has been little effort to aid stock recovery of this species. Due to their high unit value only slight increases in stock abundance could have a significant impact on the socio-economics of the areas in which they are still fished. The low but relatively stable landings of crawfish during the last 7-8yrs have been especially important in light of more erratic fluctuations in salmon landings. All Irish landings of the species are exported to continental Europe. Most European stocks of the species are also considered to be fully or overly exploited, with demand always exceeding supply. A conservative E.U. Minimum Landing Size (MLS) of 110mm carapace length is currently the only specific regulation relating to the harvest of *Palinurus* in Ireland. There is almost nothing known of the recruitment or early life history of this species, or of factors that may constrain population recovery. The construction of growths curves for early life history would have application for assessment of any future proposals to conduct v-notching for this species, while providing an estimate of the likely lag time required between implementation of such activities and a perceivable benefit.



Objectives

- To implement a tagging programme to construct growth curves for sub-legal sized *Palinurus*.
- Describe the habitat requirements of early benthic phase and juvenile specimens on a *Palinurus* nursery ground.
- To implement a logbook system for all vessels fishing for this species in the Donegal pilot region.
- To assess the likely benefit of v-notching programmes for this species.

