#### CRUSTACEA

## Belgium Belgique

(F. Redant)

# Crangon crangon

Biannual sampling (in spring and autumn) of the brown shrimp stock and its predators and competitors off the Belgian coast was continued in 1985. The samplings consisted of 15 minutes' hauls with a small meshed beam trawl on about 35 fixed stations. The investigations included qualitative and quantitative analyses of the epibenthic and demersal fauna, and measurements of the length composition of the shrimp stock.

A critical study on the evidence of protandric hermaphroditism in brown shrimp was completed. It consisted of histological examinations on about 600 male shrimps in the size class 40-50 mm, on an evaluation of the consequences of a sex-change on the reproductive potential of the shrimp population and on recrutement to the exploitable stock.

# Nephrops norvegicus

The sampling of commercial  $\underline{\text{Nephrops}}$  landings was continued and extended in order to monitor possible long term changes in the catch composition and the exploitation pattern of the Norway lobster stock in the Central North Sea (Botney Gut - Silver Pit).

A preliminary study on seasonal variations in the size composition of the landings was completed. It showed a clear seasonal pattern, which was believed to be related to the reproductive cycle of female <a href="Nephrops">Nephrops</a>. To test this hypothesis a year-round sampling programme, including observations on the egg-bearing state of the females, was started in April 1985. This programme is intended to continue until mid-1987.

## Other species

A comprehensive study on the relationships between physical environmental parameters (such as depth, granulometry of the sea bed and hydrodynamic features), and the distribution and abundance of major epibenthic species (such as Crustaceans and Echinoderms) in the Belgian coastal waters was started. These investigations are based on the results of biannual sampling surveys in the period 1973-1985.