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A bibliography on the effects of bottom fishing gear
and harvesting techniques on benthic biota

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ABSTRACT

The present bibliography covers the literature on the effects of seaweed, fish and shellfish harvesting techniques, ranging from digging and hand raking to dredging, hydraulic dredging and bottom trawling, on the sea bed, the zoobenthos and the phyto-benthos.

RESUME

Cette bibliographie couvre la littérature sur les effets d'une large gamme de techniques de récolte des algues, de poissons, de crustacés et de mollusques, du fouillement et du ratissage à la main au dragage, le dragage hydraulique et le chalutage de fond, sur le fond de la mer, le zoobenthos et le phytobenthos.

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1. Introduction

On request of the ICES Benthos Ecology Working Group (ICES, 1986, Annex 2) the author compiled a bibliography on the effects of bottom fishing gear on benthic organisms.

The present bibliography contains about 65 references on the impact of a wide variety of seaweed, fish and shellfish harvesting techniques, ranging from digging and hand raking to dredging, hydraulic dredging and bottom trawling, in both the inter- and the subtidal, on the sea bed, the zoobenthos and the phytobenthos.

The references have been selected from different sources, the main ones being :

- a. the compiler's personal reference system,
- b. other bibliographies and current abstracts,
- c. scientific journals,
- d. collected reprints from scientific institutes, and
- e. references from the papers themselves.

Each reference is preceded by a code, providing information on the content or scope of the publication :

- B--- : publications dealing with, amongst others, the impact of bottom fishing gear and harvesting techniques on the sea bed,
-Z-- : ... on the bottom fauna in general,
--S- : ... on commercial shellfish species, and
---P : ... on the phytobenthos (seaweeds and seagrasses).

With respect to the publications under the last three items it should however be stressed that, as a rule, only papers on the effects of the harvesting process on benthic organisms, whether commercial or not, remaining on the sea bed were included in this bibliography. These effects generally can be described as "fishing induced" and the resulting mortalities as "fishing induced" or "indirect fishing mortalities".

Publications on fishing or discarding mortality of both marketable and undersized shellfish, or on the efficiency and the catch composition of bottom fishing gear, on the other hand, were considered as being beyond the scope of this review.

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