

## INVESTIGATION OF M/F BELVEDERE ON DEMERSAL FISH IN THE GULF OF TRIESTE

by

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## Abstract.

First results obtained on the possibilities of trawling indicate that it is not possible to increase it further locally since available demersal stocks have been clearly exhausted.

## Resumé.

L'expédition de pêche "Belvedere" a mis en évidence l'épuisement des ressources marines naturelles du haut Adriatique et en particulier du Golfe de Trieste. Les quantitatifs capturés en qualité et en quantité consentent d'avoir des préoccupations pour la masse de poissons non seulement de la côte occidentale de l'Adriatique mais aussi pour celle orientale au long de laquelle on a les effets indirects de la pêche irrationnelle exercée par les pêcheurs nationaux.

On 14th, 15th and 16th March 1978, the Marine Park of Miramare carried out a survey on the possibilities of exploiting demersal marine resources in the Gulf of Trieste. The research was based on the following lines:

- 1) A more thorough research concerning experimental technology in relation to the various types of sea bottom for trawling purposes and the latter's effects on the substrata and composition of stock.
- 2) Evaluation of the quantity and extension of the natural beds of Edible Lamellibranch Molluscs: Solen vagina, Arca noe, Modiolus barbatus, Ostrea edulis, Mytilus galloprovincialis, Venus verrucosa, Pecten jacobaeus, ecc.
- 3) Survey of the existing marine resources in the mixed Jugoslav-Italian fishing grounds, with the EEC will negotiate for common use.

4) Definition of the quality of the sea to meet the health standards set by the new legislation.

| Station | Total Kg.    | Fish in Kg.   | Moll.etc. Kg. | Various       |
|---------|--------------|---------------|---------------|---------------|
| 1       | 600          | 1.630         | 5.580         | 5.000         |
| 2       | 400          | 0.970         | 3.560         | 2.000         |
| 3       | 700          | --            | --            | --            |
| 4       | 700          | 1.320         | 7.500         | ∅             |
| 5       | 300          | 9.190         | 2.770         | 15.610        |
| 6       | 600          | 1.560         | 4.640         | 7.300         |
| 7       | 150          | 0.150         | 0.450         | 1.000         |
| 8       | 150          | 0.880         | 0.810         | 1.520         |
| 9       | 100          | 1.270         | 1.000         | 0.300         |
| 10      | 150          | 3.090         | 5.080         | ∅             |
| 11      | 2.100        | 28.200        | ∅             | 6.500         |
| 12      | 350          | ∅             | ∅             | 3.000         |
| 13      | 150          | ∅             | ∅             | 3.200         |
|         | <u>6.450</u> | <u>48.260</u> | <u>31.390</u> | <u>45.430</u> |

Total fish captured on a percentage basis: 0.74%; Molluscs Cephalopds 0.48%; Various marketable 0.70.

Catch per hour showed for fish: 4.42 Kg. per hour. Molluscs catch per hour: 2.87 Kg. per hour. Various marketable: 4.16 per hour of actual catch by "hauling in started".

The Gulf of Trieste which was taken as a model for the whole Northern Adriatic shows depauperation of most of its demersal stock, while its non migratory ichthiofauna and its trophic icthiomass could still be rationally exploited.

