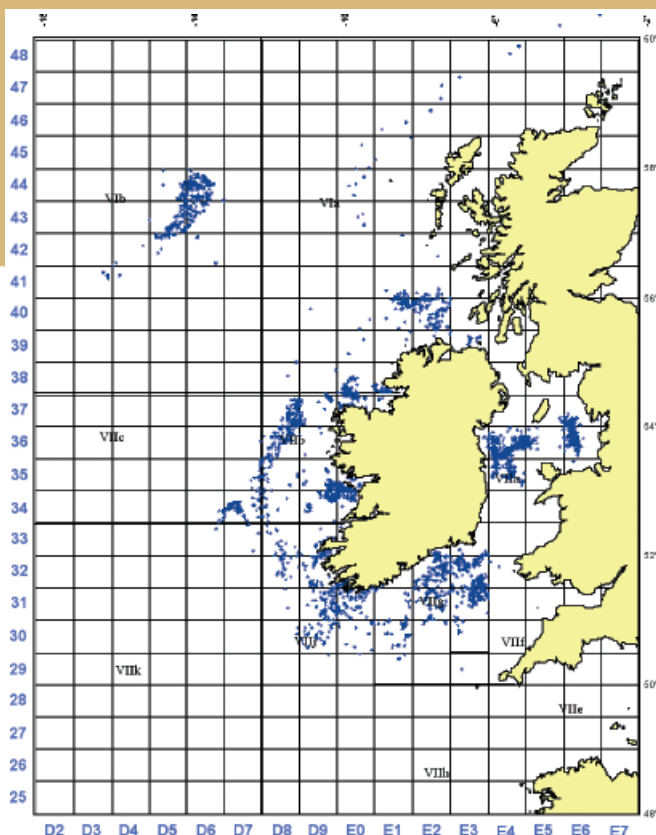


Between 1993 and 2005, the FATs have sampled 474 commercial fishing trips covering numerous fishing grounds including Stanton Bank, back of the Aran Islands and the Smalls. The positions of the hauls from which discards have been sampled are shown below.



## Take a FAT to Sea...

The FSS Fisheries Assessment Technicians carry out very valuable work on assessing discard rates in the Irish fleet. They need to go to sea on commercial fishing vessels every month and for this we rely on the co-operation of the fishing industry. Without the support of fishermen this programme could not succeed. For contact details please see overleaf.

Thank you

## The Fisheries Science Services Team

In order to ensure the sustainable harvesting of the fisheries resources, it is essential that management is underpinned by sound marine science that is clear, transparent, timely, impartial and inclusive.

The Marine Institute's Fisheries Science Service Team works closely with the fishing industry to provide this marine science through.

- Research Vessel Surveys (Acoustic, Groundfish, Egg and Larval Fish, Underwater TV)
- Surveys on Commercial Vessels
- Market Sampling of Landings
- Discard Sampling at Sea
- Analysis of Logbook Data
- Studies on the Biology of Fish
- Working with the Regional Advisory Councils (RAC's)
- Articles in the trade press
- Working with our international scientific colleagues
- Regular meetings with Industry Representatives and DCMNR
- Regular Meetings with EU

This information is essential to our understanding of the current state of the fisheries resources and the ecosystem in which they live.

More detailed information, as well as similar leaflets on related issues are available from

Marine Institute, Fisheries Science Services (FSS), Rinville, Oranmore, Co. Galway, Ireland. Phone: + 353(0) 91 387200

### Or your local Port Based Technician in

Clogherhead	(041) 9889788
Dunmore East	(051) 385011
Castletownbere	(027) 71937
Ros a Mhíl	(091) 572584
Killybegs	(074) 9741871

### HEADQUARTERS

MARINE INSTITUTE  
Rinville,  
Oranmore,  
Co. Galway  
Tel: +353 91 387200  
Fax: +353 91 387201

### MARINE INSTITUTE REGIONAL OFFICES & LABORATORIES

MARINE INSTITUTE  
80 Harcourt Street  
Dublin 2  
Tel: +353 1 4766500  
Fax: +353 1 4784988

MARINE INSTITUTE  
Furnace  
Newport  
Co. Mayo  
Tel: +353 98 42300  
Fax: +353 98 42340

[www.marine.ie](http://www.marine.ie)

[www.marine.ie](http://www.marine.ie)

A DEEPER UNDERSTANDING...

# DISCARDING



## FISHERIES SCIENCE SERVICES

Assessing, researching and advising on  
the sustainable exploitation of living  
marine resources in a healthy  
ecosystem



## Introduction

Discarding occurs because most methods of fishing catch more fish than the fisherman can legally land and sell. Therefore any commercial fishing activity will result in discarding of unwanted catch.

## What are Discards?

**Discards can be defined as that portion of the total weight of undersized, un-saleable or otherwise undesirable whole fish discarded at the time of capture or shortly afterwards.**

## The need for data on discarding

There is a growing move among scientists to assess several fish stocks in a specific area and determine how all of the species interact. This new type of assessment procedure requires not only information on catches of the main commercial species but also information on catches of what fisherman usually call "rubbish" or "trash fish".

These fish play an important part in the food chain and will either eat or be eaten by many of the important commercial species.

The inclusion of discarding data in the scientific assessments of fish stocks increases the accuracy of assessments. Scientists currently use landings data to estimate stock size and thereby estimate fishing mortality. It is now recommended that the catch data used in assessing fish stocks should include estimates of discarding.

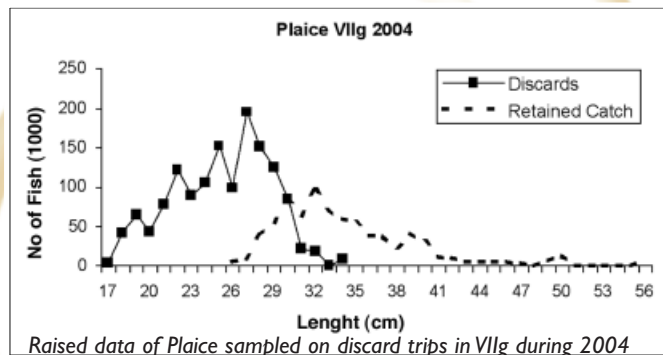
Discard monitoring can demonstrate the effectiveness of technical conservation measures such as mesh changes, closed seasons and closed areas in the management of commercial fish stocks.

## The Irish discard sampling programme

In recent years scientists who carry out assessments of fish stocks around Ireland and in the North Sea have expressed serious concern about the level of catches recorded in many of the fisheries. These assessments provide the EU with information about the status of the various fish stocks and are the basis on which the annual Total Allowable Catches (TACS) and quotas are set.

Scientists have therefore strongly urged countries to collect information on discard levels. This request has been answered by a number of countries including Ireland. In the past, funding for this programme has been under the guises of many EC projects but in 2002 with the establishment of the data collection (regulation EC No. 1639/2001) the monitoring of discards is now a mandatory part of a European fisheries sampling programme.

Fisheries Science Services (FSS) currently conducts three discard sampling programmes:



1. The Fisheries Assessment Technician (FAT) discard programme monitors all the major fleets in the main ports. In 2004 this programme was augmented with the inclusion of Contract Sea Samplers (CCS).
2. ECONEPH-Evaluates the ecosystem benefits of technical measures in the Western Irish Sea Nephrops fishery.
3. Deep-water survey programme monitors deep water species off the west of Ireland.



## Discard sampling

Routine monitoring of discards is essential for stock assessment purposes because discard rates are known to vary from year to year depending on year class strength, seasonal fishing practices and other factors.

The monitoring of discards is also a very important element of studies on the marine environment. Information on the numbers and types of species (fish and invertebrates) discarded are required to evaluate the impact of fishing on the environment. FSS collect discard data on both the commercial fisheries, and the non-commercial species.

Technical conservation measures are becoming increasingly important in the management of fish stocks. The FSS discard programme covers all the major Irish fleets fishing out of the major ports around the coast. The data collected provide valuable information on gear selectivity and may help with the assessment of technical conservation measures in the future.

## Collection of Discard Data

The FATs are regionally based (Killybegs, Ros a Mhíl, Castletownbere, Dunmore East & Clogherhead), sea-going staff. The FATs contact various skippers in order to go to sea. The co-operation of the skipper is essential to the success of the programme. On board the vessel data is collected on the gear type used, fishing ground, weather conditions, species composition and quantity of the landings and discards in the catch. Data on the length, weight and age composition of each discarded species is collected as well as length data for the landed species.