



## The Future

The BSA will have a major role to play in the rebuilding of fish stocks in the waters around Ireland. Measures that reduce discarding, protect spawning areas, enhance the use of environmentally friendly fishing gears and establish protected areas must be a feature of new management plans for the area. They can only be established and will only work through a close co-operation between scientists, industry and managers. Now more than ever, we must all work closely together to help rebuild fish stocks, protect their ecosystem to ensure sustainable harvesting of this valuable resource.



## 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

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| Dunmore East   | (051) 385011  |
| Castletownbere | (027) 71937   |
| Ros a Mhíl     | (091) 572584  |
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A DEEPER UNDERSTANDING...

# BIOLOGICALLY SENSITIVE AREA



## FISHERIES SCIENCE SERVICES

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

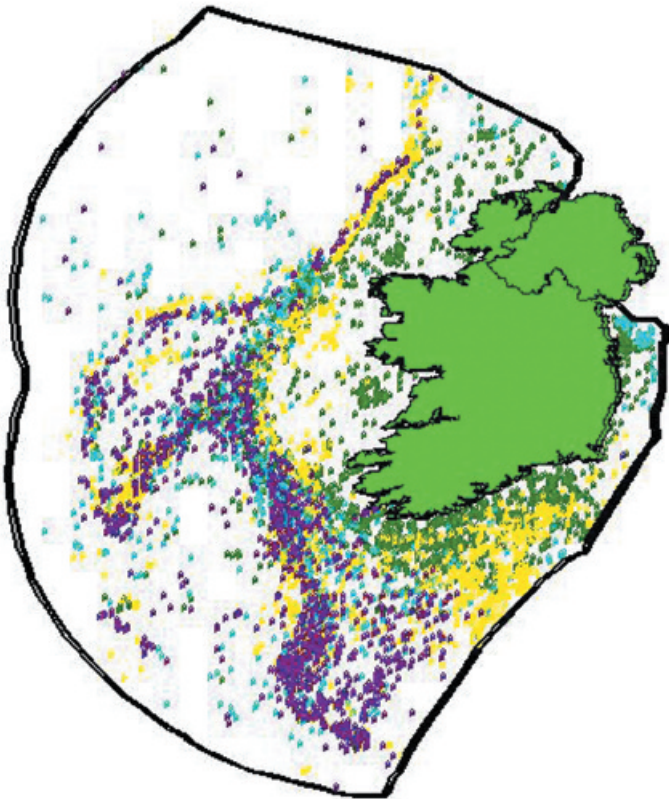




## Fishing Activity

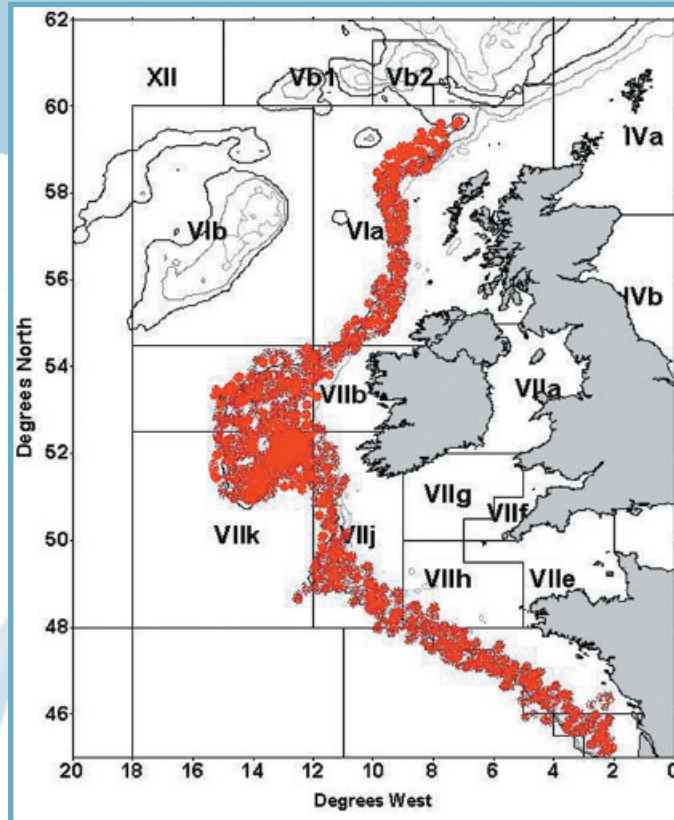
The waters around Ireland are some of the most productive fishing grounds in the world. In 2004, an estimated 1.5 million tonnes of fish (worth €1.4 Billion) were landed from these waters by the international fishing fleets, mainly from Spain, France, UK, Norway, Holland and Ireland. The main fish species caught are mackerel, horse mackerel, blue whiting, herring, cod, whiting, haddock, saithe, hake, megrim, monkfish plaice, sole and Nephrops.

The map below shows some of the fishing vessel activity in the waters around Ireland in 2004. The data is derived from Irish Naval Sightings of fishing vessel activity and provide a good indication of the relative level and areas of fishing within Ireland's EEZ (Exclusive Economic Zone). The purple dots are Spanish vessels; the yellow dots are French vessels; the blue dots are UK vessels and the green dots are Irish vessels.



## Spawning Areas

These waters also contain some of the most important fish spawning and nursery areas in the North Atlantic. The main mackerel, horse mackerel and blue whiting spawning grounds for the North Atlantic occur off the west of Ireland. There are important spawning areas for hake and megrim off the south west of Ireland and important cod spawning areas in the Irish Sea and Celtic Sea areas. The map below shows the general areas for mackerel and horse mackerel spawning (April to July) off the west coast of Ireland.



## Juvenile Fish

There are important juvenile fish nursery areas off the coast of Ireland. Figure 1, opposite, shows the distribution of age 0 and age 1 hake from joint UK Scottish, Irish and French Groundfish surveys. The importance of the south coast of Ireland can be clearly seen. There are also important nursery areas for herring, cod and haddock in the waters around Ireland.

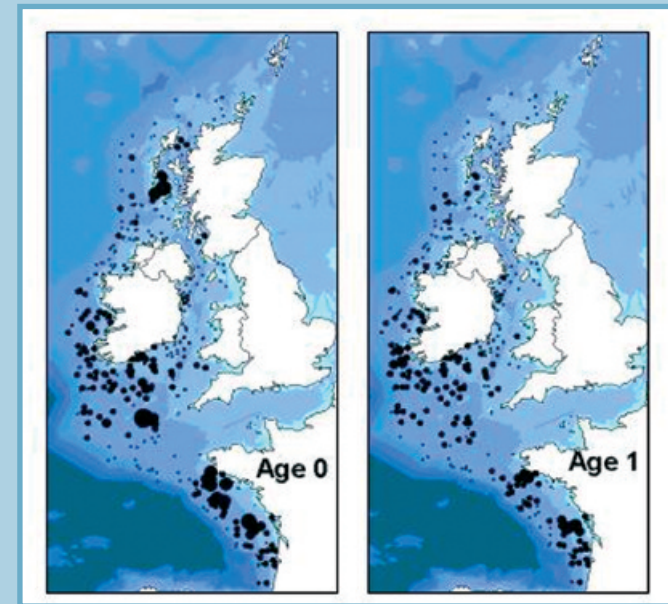


Figure 1

## Biologically Sensitive Area

The Marine Institute, working closely with DCMNR and Industry, compiled information on the distribution and abundance of eggs and larvae, juvenile and adult fish in the waters around Ireland and presented these data to the EU Commission. This presentation was powerful evidence of the biological importance of this area. In 2003 the EU Commission established a "Biologically Sensitive Area (BSA)" off the south west of Ireland and the area is shown on the map above (green area). In 2003, the EU also established a specific fishing effort regime inside the BSA and outside the BSA for demersal fishing vessels as well as scallop and crab fisheries (i.e. different fishing effort regulations apply inside and outside of the box).

