

FSP REVIEW

CEFAS PAPER 1

SUMMARY STATISTICS 2005-6 to 2007-08

This paper includes the lists of the FSP projects in the last three year FSP programme, summary statistics and examples of uptakes of the work.

Paper 2 is a compilation of the 2006-2007 completed project summaries to show the character of the work undertaken.

Paper 3 is an evaluation of the actual or potential utility of the FSP time-series.

FSP Projects 1 April 2005 – 31 March 2008

Project No	Project Title	2005-06	2006-07	2007-08
1	North East Cod	✓	✓	✓
2a	Western Anglerfish (North)	✓	✓	✓
2b	Western Anglerfish (South)	✓	✓	✓
3a	Irish Sea Roundfish (West)	✓	✓	✓
3b	Irish Sea Roundfish (East)	✓	✓	✓
4	North Sea lemon Sole and Plaice	✓		
5	Western Edge Ghost Nets (Gill Net Retrieval)	✓		
6a	Western Channel Sole (West)	✓	✓	✓
6b	Western Channel Sole (East)	✓	✓	✓
7	Western Cod	✓		
8	Hake Selectivity	✓		
10	East Greenland Cod	✓		
11	North Sea Lemon Sole and Plaice		✓	
12	Western Edge Ghost Nets (Gill Net Retrieval)		✓	
13	North Sea Whiting		✓	
14	Yorkshire Coast Velvet Crab Populations		✓	
15	Eastern Channel Cod		✓	
16	Squid Fishery, NE Coast		✓	
17	Squid Fishery, English Channel		✓	
18	North Sea Cod Abundance			✓
19	Thames Ray Tagging			✓
20	Northern North Sea Saithe Fishery			✓
21	Skate and Ray Discards			✓
22	Benthic Release Panels			✓
23	N.E Coast Crab Biology			✓
24	Comparative Fishing Trials			✓
Total projects per year		9	11	11

SUMMARY STATISTICS

Fisheries Science Partnership Proposal and Tendering Information 1 March 2005 – 31 March 2008

Year	№ of Proposals submitted to SG	Agreed № of Proposals to Proceed	№ of Tenders Received	№ of Boats Awarded	№ of Boats per Area			
					North Sea	Irish Sea	SW & Channel	International
2005-06	20	9	35	12	2	2 (+1)	6	2
2006-07	14	6	12	8	5		2	1
2007-08	15	7	17	21	18		3	
Totals	49	22	64	41	25	2 (+1)	11	3

Notes

1. The above does not include post-tender information for the last FSP project (comparative fishing trials in the North Sea)
2. The time-series projects and vessels appear in only the 2005/06 line but operated in each of the three years; the (+1) is the anticipated change of vessel for the western Irish Sea survey.
3. The large number of vessels in 2007/08 is due to the multi-vessel projects of the Thames Rays & "cod watch"

UTILITY AND UPTAKE OF FSP PROJECTS

Introduction

To appreciate the significance of the Partnership we should recall the Net Benefits review and the Government Response, Securing the Benefits.

Net Benefits considered that the fishing industry and fisheries departments need to forge a closer partnership to achieve long-term UK objectives, believing that neither government nor industry can succeed alone in achieving sustainable management.

Science needed to be trusted. Strategy Unit consultations showed that there was a real need to reconnect the fishing industry with the science base and develop a better sense of ownership and trust.

Net Benefits considered that improving industry trust (of science) is a fundamental objective. The stock assessments undertaken by UK and ICES scientists are of world-class quality, and yet are not trusted by the industry. Much of this distrust is due to the corrosive effect of non-compliance and the resulting poor information on catches. As a result, fishermen disbelieve assessments that are based on this data because they know its flaws. Improving trust in scientific assessments will involve actions by scientists, government and industry to develop a better shared understanding of how such data is best used in fisheries management, and the economic value of good data to commercial fishing businesses.

Securing the Benefits concluded that science which is valid and trusted is an essential element in successful fisheries management and in integrating fisheries management more closely into that of the marine environment. An important element of this is using fishermen's information in fisheries assessment.

Consequently the Defra Fisheries Science Partnership was extended, with additional science funding and greater industry involvement in data collection and prioritization of science.

Other mechanisms also seek to achieve these goals, such as industry participation in the Science Advisory Group, the opening up of ICES, scientists supporting the RACs and cultural changes. Nevertheless the FSP is a key tool to achieve both specific objects of detailed projects and also the higher goal of joint science and increased partnership and trust in the science outcomes.

Aims of the FSP

The objectives of the programme are to build relationships between UK fishermen and scientists and to involve fishermen in the co-commissioning of science.

To achieve these objectives, the programme :

- a. provides information from commercial fishing catches on key stocks to supplement data sources traditionally used in ICES assessments;
- b. investigates concerns raised by fishermen on scientific assessments or on stocks not currently assessed;
- c. investigates innovative scientific methods and or more selective/environmentally friendly fishing methods; and,
- d. supports the work of Regional Advisory Councils.

Fishing vessels able to implement the projects in the programme will be eligible. The programme will mainly support projects in fisheries within UK waters.

Outcomes

In relation to the broader goals of the programme, Cefas notes that :

The FSP has offered a real opportunity to undertake useful collaborative science with industry from concept, through execution to final delivery of results.

The projects were proposed almost exclusively by industry, often then developed jointly, but with the industry still "owning" the project itself. This has been a learning process for all concerned and has served to draw the two groups closer together.

The FSP projects have produced quality science capable of withstanding international peer review, some papers are listed below

The FSP is an ideal mechanism for short-term *ad hoc* studies, many of which cover issues that have been troubling stakeholders for some years. Examples are gear work, discard work, survival studies, tagging, bycatch, ghost net mortality and extent, and cod catchability by the research vessel gear.

A second paper will review the utility of the use of the time-series, and these data will feed directly into ICES stock assessments and should be a significant tool in ensuring fishers' own data are used directly by scientists.

Some examples of where the FSP results have directly assisted management include :

- ICES was asked to compile data on documented historical or present spawning/aggregation areas of blue ling in the NEAFC Convention area. Data used for the compilation included those from an FSP survey in 2004
- Cefas used FSP information to analyse the impact of Belgian beam trawlers converting to otter trawling in the Bristol Channel fisheries.
- The Spring 2004 FSP survey was used in evaluating the Anglo/Irish/French Industry proposal for closure of rectangles 30E4, 31E4 and 32E3 to cod fishing in the Celtic Sea during the period January to March.
- The spring 2004 and 2005 surveys were used to evaluate an industry proposal to close two areas off North Cornwall to all fishing from 1 February to 30 April.
- As part of a review of the extent and timing of the Irish Sea cod closure, Cefas used the FSP spring 2004 survey to look at potential spawning southwest of the Isle of Man.
- The Marine Stewardship Council evaluation of the Norwegian directed North Sea saithe fishery is examining the results of a 2004 FSP saithe survey in order to understand the potential bycatch of cod within saithe fisheries in the northern North Sea.
- Flatfish and cod linkages in the Eastern Irish sea were analysed in September 2005 using the results of a 2004 FSP project. The results were communicated to the Commission and underpinned the Council decision that allowed a 15% increase in the TAC of plaice between June and September inclusive subject to various conditions.
- In 2006, results of an FSP time-series project were used to advise on the Clyde closure.
- Also in 2006, we provided advice, based on the FSP survey, on the bycatch of other flatfish in a proposed lemon sole fishery.
- The FSP commitment was used in the UK bid for additional days for “enhanced sampling” during 2006 and 2007.
- Experience from the two FSP two gillnet retrieval surveys as well as our involvement at the ICES Working Group on the Biology and Assessment of Deep-Sea Fisheries Resources, allowed Cefas to become a partner in the EU DEEPCLEAN project (targeting retrieval of ghost-nets, and estimating the extent of such material in EU waters).

- The Channel plaice and sole FSP, time-series data were presented to ICES in 2007 and the plaice data were used in a benchmark assessment.

Scientific papers take some time to appear but some of the FSP based publications include :

A. Revall, J. Cotter, M. Armstrong, J. Ashworth, R. Forster, G. Caslake and R. Holst (2007) The selectivity of the gill nets used to target hake in the Cornish and Irish offshore fisheries. *Fisheries Research*, 85(1-2): 142-147

Armstrong, M.J., Payne, A.I.L. and Cotter, J. 2007 (in press). Contributions of the fishing industry to research through partnerships. *Beverton and Holt commemorative volume*.

Also -

Armstrong, M., Beveridge, D., Cotter, J., Revall, A., O'Brien, C. and Dann, J. (2005) Fisheries Science Partnership programmes off the NE and SW coasts of England and in the Irish Sea: experiences gained and future directions. *ICES CM 2005/Y:06*; 18pp