

Fish and fisheries in area SEA8

The purpose of this report is to provide an initial assessment of the availability, type and quality of fish resource and commercial fisheries data in SEA8. It consists principally of a list of references in EndNote format which act as an input to the meta-data inventory, and which describe the source of information, its spatial extent, and where they can be found. The list of references is provided in hard copy and in electronic format.

The area covered by SEA8 corresponds to the national waters off the southern and south-western coasts of England and Wales. This region covers several ICES statistical divisions, which are the areas generally used for fisheries purposes. The pertinent ICES divisions are VIIId (eastern English Channel from the Dover Straits to 2°W), VIIe (western English Channel from 2°W to the Scilly Isles), VIIIf (Bristol Channel), VIIg (northern Celtic Sea), VIIh (southern Celtic Sea) and VIIj (western Celtic Sea). Only VIIIf is exclusively in SEA8, with the other divisions partly in either French or Irish national waters. This review has focused on studies and data sets in the SEA8 area, although many of these data sets extend outside the limits of SEA8

The purpose of this report is not to describe the extent of fish resources, fisheries activities or the potential implications of oil and gas exploration activities on them. However, the following description provides a brief overview of the major issues that will need to be considered. The main focus of oil and gas exploration activity in the region is in the oil fields near Poole, and the concession area extending westwards to Weymouth. The entire region supports valuable fisheries, including demersal fish, pelagic fish and shellfish, and several of these are prosecuted by international fleets, particularly those of the French, Spanish and Belgians. There is some regional variation in the key biological resources exploited.

The most commonly used commercial gears in the eastern English Channel (VIIId) are gill and drift nets, pots and trawls, and the species targeted include demersal fishes (e.g. sole, plaice, rays, cod and whiting), pelagic fish (e.g. bass and herring) and shellfish (e.g. oysters, cuttlefish and crab). The fishing grounds in the western English

Channel (VIIe) are generally deeper and rougher, and species such as anglerfish, lemon sole, various crustaceans, scallops, conger eel, pollack and ling become increasingly important. Many pelagic species also occur in the western English Channel, and the large number of juvenile mackerel in the area has led to the establishment of the “Mackerel Box”.

Important commercial species in the Bristol Channel (ICES area VIIf) include anglerfish, cod, hake, plaice, rays, sole and whiting, and the inshore fleet generally use a variety of gears, ranging from pots (for crab, lobster and whelks), set nets (e.g. for rays) and long-lines (e.g. for porbeagle shark). Pelagic fish are not of high commercial value in the Bristol Channel, although there is a small fishery for Milford Haven herring. There are important bass fisheries in both the English and Bristol Channels. The fish fauna of the Bristol Channel and Severn Estuary is relatively well known, with several published accounts of the fish from the intake screens of power stations (see the works of Henderson).

Further offshore, in the Celtic Sea, the deeper waters support valuable fisheries for anglerfish, conger eel, ling, pollack, megrim, hake and rays. This area also contains some grounds where *Nephrops* may be fished. Mackerel are the basis of an important pelagic fishery in the south-western approaches.

Biological and fisheries data for SEA8/VIID-h are collected by CEFAS during annual beam trawl surveys in (a) eastern English Channel (b) Start Bay and (c) Bristol Channel (part of the Irish Sea beam trawl survey). Other annual fishing surveys conducted by CEFAS in SEA8 include the young-fish survey (Dover to Portland Bill), bass survey in the Solent (this survey records data for all fish species) and the groundfish survey in the western English Channel and Celtic Sea (using a Portuguese High Headline Trawl (PHHT)). CEFAS also have regular scallop surveys in the south-west, and data from plankton surveys (for the eggs/larvae of fish and crab) in the Bristol Channel (1990) and English Channel (1991). Several published analyses of these data sets are available without the need for access to the raw data. CEFAS surveys in the area provide the most spatially comprehensive fish resource data sets for SEA8.

Several other organisations are also engaged in fisheries research in the Bristol Channel, English Channel and Celtic Sea. The Marine Institute (Dublin) conducts a groundfish survey in the Irish Sea, of which a few stations (<10) occur in the northern part of SEA8. The Institut Francais de Recherche pour l'Exploitation de la Mer (IFREMER) conducts an annual Channel Groundfish Survey (CGFS) in area VIId using a GOV trawl, and this survey has some stations in SEA8.

Other organisations that hold data and/or reports pertinent to the fish and fisheries of SEA8 include:

- Marine Biological Association (Plymouth)
- School of Biological (University of Wales Swansea)
- Southampton Oceanography Centre
- South Wales Sea Fisheries Committee (Swansea)
- Devon Sea Fisheries Committee (Brixham)
- Cornwall Sea Fisheries Committee (Truro)
- Isles of Scilly Sea Fisheries Committee (St Mary's)
- Southern Sea Fisheries Committee (Poole)
- Sussex Sea Fisheries Committee (Hailsham)
- Kent and Essex Sea Fisheries Committee (Maidstone)

Bibliography

The attached list of published and unpublished paper references and sources of useful metadata has been completed according to the request in Section IV – Scope of Services, section 3.2.3. They are presented in alphabetical order. In general, all publications that refer to a scientific journal will be freely available from one of the main marine biological libraries in the UK. More precise details are provided for unpublished reports and working papers that provide useful information but which are not freely available. There are considerable quantities of data for SEA8 which describe the distribution of fish and shellfish species, and the seasonal deployment of commercial fishing fleets. While these can be purchased, it is considered an unnecessary expense as many useful summaries are already available, and for datasets

such as commercial fish landing and effort data, regional summaries can be obtained from DEFRA at modest cost.

We have used a 5 point quality scale as advised. Many of the references listed are of high quality and should be used in a description of the fisheries of SEA8. We have not distinguished between those references that present raw data (i.e. in the form of data reports or bubble charts), and those that draw on these raw data to produce more generalised descriptions of resource distribution. Fisheries datasets collected by the Marine Laboratories have a high level of quality assurance and can be considered to be a reliable source of information. While there are ongoing concerns in relation to the quality of commercial fisheries catch and effort data, there is no other source of such information.

Commercial fisheries data and fish resource information are generally collected on a broad scale, so we have referred to the location of these data in terms of the ICES division in which they occur (Figure 1, and note (d) in the bibliography).

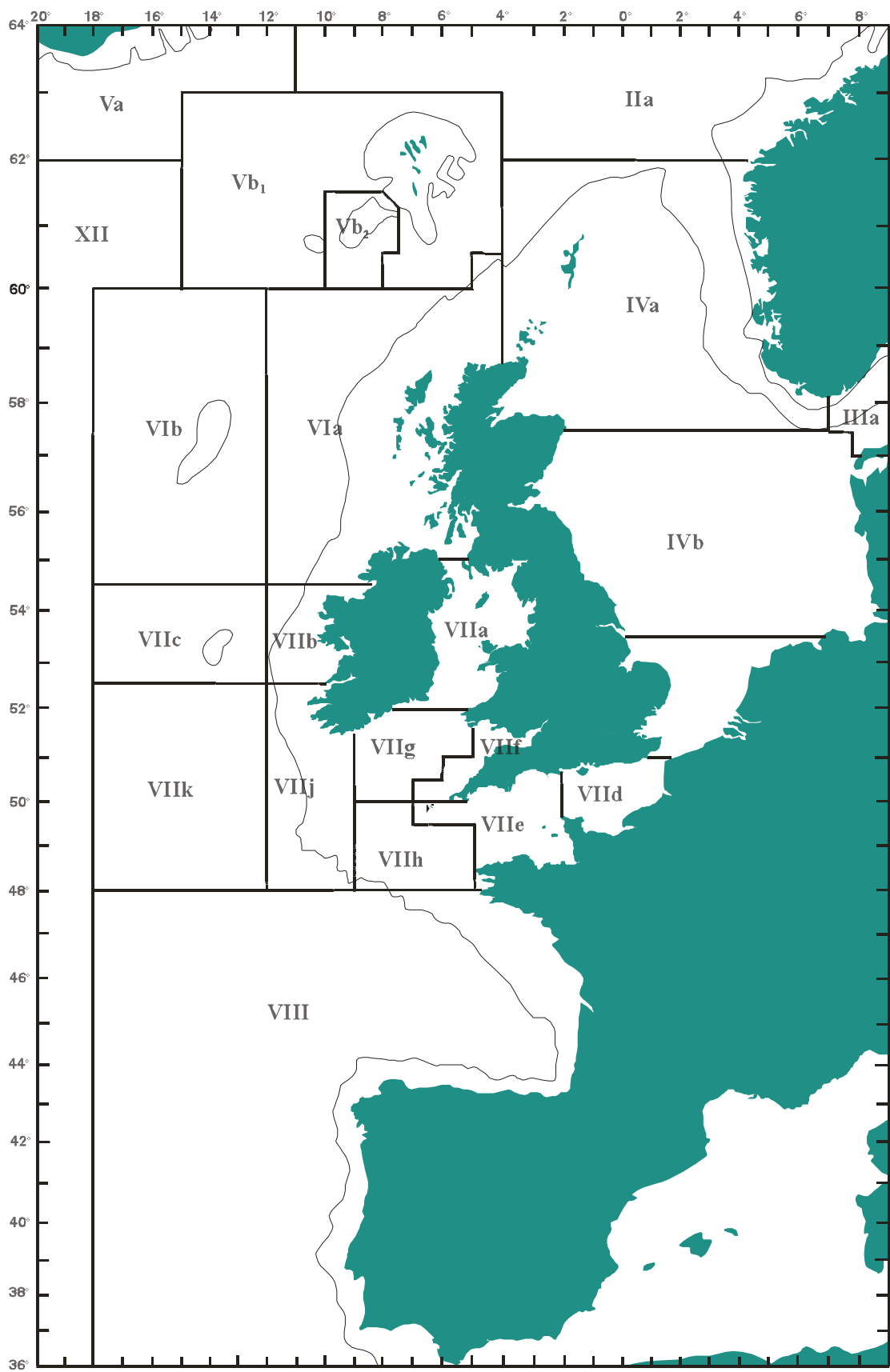


Figure 1: Map of north-western Europe with ICES areas marked. Area SEA8 corresponds, in part, with ICES divisions VIIId-j.

Reference Type: Journal Article
Record Number: 351
Author: Abbasi, AR; Shackley, SE
Year: 1996
Title: Study of population biology of thick-lipped grey mullet, *Chelon labrosus* R. and thin-lipped grey mullet, *Liza ramada* R.
Journal: Pakistan Journal of Zoology
Volume: 28
Pages: 69-74
Keywords: Bristol Channel, fishes, Mugilidae
Notes: a. Available from Science Reference Library
b. Free
c. 2
d. ICES area VII f

Reference Type: Journal Article
Record Number: 365
Author: Ajayi, TO
Year: 1982
Title: Food and Feeding Habits of *Raja* Species (Batoidei) in Carmarthen Bay, Bristol Channel.
Journal: Journal of the Marine Biological Association of the United Kingdom
Volume: 62
Pages: 215-223
Notes: a. Held at most Marine Biological Libraries
b. Free
c. 3
d. ICES area VII f

Reference Type: Journal Article
Record Number: 399
Author: Bannister, RCA
Year: 1999
Title: Dr Walne Memorial Lecture: A review of the shellfish resources and their management.
Journal: Proceedings of the thirtieth annual shellfish conference 1999.
Notes: Unpublished review, available from The Shellfish Association of Great Britain. Definitive description of shellfish biology and exploitation.

Reference Type: Journal Article
Record Number: 151
Author: Bennett, DB; Brown, CG
Year: 1983
Title: Crab (*Cancer pagurus*) migrations in the English Channel
Journal: Journal of the Marine Biological Association of the United Kingdom
Volume: 63
Pages: 371-398
Keywords: English Channel, Crustacea, Brachyura
Notes: a. Held at most Marine Biological Libraries
b. Free
c. 4
d. ICES area VII d-e

Reference Type: Journal Article

Record Number: 379

Author: Blacker, RW

Year: 1981

Title: Recent occurrences of blue whiting, *Micromesistius poutassou* , and Norway pout, *Trisopterus esmarkii* , in the English Channel and southern North Sea

Journal: Journal of the Marine Biological Association of the United Kingdom

Volume: 61

Pages: 307-313

Notes: a. Held at most Marine Biological Libraries

b. Free

c. 2

d. ICES area VII e

Reference Type: Journal Article

Record Number: 249

Author: Boon, MJ

Year: 1992

Title: Landings into England and Wales from the UK demersal fisheries of the Irish Sea and Western Approaches, 1979-1990

Journal: MAFF Fisheries Research Data Report

Volume: 26

Pages: 37pp

Keywords: Irish Sea, Bristol Channel, English Channel, Celtic Sea, fisheries

Notes: a. CEFAS Library

b. Free

c. 4

d. ICES area VII d-j

Reference Type: Journal Article

Record Number: 352

Author: Brander, KM

Year: 1994

Title: The location and timing of cod spawning around the British Isles

Journal: ICES Journal of Marine Science

Volume: 51

Pages: 71-89

Notes: a. Held at most Marine Biological Libraries

b. Free

c. 3

d. ICES area VII d-f

Reference Type: Journal Article

Record Number: 381

Author: Brown, CG; Bennett, DB

Year: 1980

Title: Population and catch structure of the edible crab (*Cancer pagurus*) in the English Channel

Journal: Journal du Conseil International pour l'Exploration de la Mer

Volume: 39

Pages: 88-100

Notes: a. Held at most Marine Biological Libraries

b. Free

c. 4

d. ICES area VII d-e

Reference Type: Journal Article

Record Number: 157

Author: Carpentier, A

Year: 1998

Title: Observations sur la répartition et l'abondance du merlan *Merlangius merlangus* (Gadidae) en Manche orientale à partir des données des campagnes CGFS

Journal: Cybium

Volume: 22

Pages: 333-344

Keywords: English Channel, fisheries, Gadidae, whiting

Notes: a. Held at most Marine Biological Libraries

b. Free

c. 3

d. ICES area VII d-e

Reference Type: Electronic Source

Record Number: 404

Author: CEFAS

Year: 1981-present

Title: Young fish survey

Notes: a. CEFAS, Lowestoft

b. Cost for analysis and interpretation

c. 5

d. ICES area VII d

Reference Type: Electronic Source

Record Number: 394

Author: CEFAS

Year: 1982-present

Title: Groundfish survey data from the western English Channel and Celtic Sea

Notes: a. CEFAS, Lowestoft

b. Cost for analysis and interpretation

c. 5

d. ICES area VII e-j

Reference Type: Electronic Source

Record Number: 397

Author: CEFAS

Year: 1983-present

Title: Survey of bass and other fishes in the Solent

Notes: a. CEFAS, Lowestoft

b. Cost for analysis and interpretation

c. 4

d. ICES area VII d

Reference Type: Electronic Source
Record Number: 391
Author: CEFAS
Year: 1989-present
Title: Fish and shellfish catches in the Bristol Channel from 4m-beam-trawl surveys
Notes: a. CEFAS, Lowestoft
b. Cost for analysis and interpretation
c. 5
d. ICES area VII f-g

Reference Type: Electronic Source
Record Number: 392
Author: CEFAS
Year: 1989-present
Title: Fish and shellfish catches in the western English Channel from 4m-beam-trawl surveys
Notes: a. CEFAS, Lowestoft
b. Cost for analysis and interpretation
c. 5
d. ICES area VII e

Reference Type: Electronic Source
Record Number: 393
Author: CEFAS
Year: 1989-present
Title: Fish and shellfish catches in the eastern English Channel from 4m-beam-trawl surveys
Notes: a. CEFAS, Lowestoft
b. Cost for analysis and interpretation
c. 5
d. ICES area VII d

Reference Type: Journal Article
Record Number: 368
Author: Claridge, PN; Gardner, DC
Year: 1977
Title: The biology of the northern rockling, *Ciliata septentrionalis*, in the Severn Estuary and Bristol Channel
Journal: Journal of the Marine Biological Association of the United Kingdom
Volume: 57
Pages: 839-848
Notes: a. Held at most Marine Biological Libraries
b. Free
c. 1
d. ICES area VII f

Reference Type: Journal Article
Record Number: 366
Author: Claridge, PN; Gardner, DC
Year: 1978
Title: Growth and movements of the twaite shad, *Alosa fallax* (Lacepede), in the Severn Estuary

Journal: Journal of Fish Biology
Volume: 12
Pages: 203-211
Notes: a. Held at most Marine Biological Libraries
b. Free
c. 3
d. ICES area VII f

Reference Type: Journal Article
Record Number: 364
Author: Claridge, PN; Potter, IC
Year: 1983
Title: Title Movements, abundance, age composition and growth of bass, *Dicentrarchus labrax* , in the Severn Estuary and inner Bristol Channel.
Journal: Journal of the Marine Biological Association of the United Kingdom
Volume: 63
Pages: 871-879
Notes: a. Held at most Marine Biological Libraries
b. Free
c. 3
d. ICES area VII f

Reference Type: Journal Article
Record Number: 362
Author: Claridge, PN; Potter, IC; Hardisty, MW
Year: 1986
Title: Seasonal changes in movements, abundance, size composition and diveristy of the fish fauna of the Severn Estuary.
Journal: Journal of the Marine Biological Association of the United Kingdom
Volume: 66
Pages: 229-258
Notes: a. Held at most Marine Biological Libraries
b. Free
c. 3
d. ICES area VII f

Reference Type: Journal Article
Record Number: 361
Author: Claridge, PN; Potter, IC
Year: 1987
Title: Size composition and seasonal changes in abundance of juvenile sole, *Solea solea* , in the Severn Estuary and Inner Bristol Channel.
Journal: Journal of the Marine Biological Association of the United Kingdom
Volume: 67
Pages: 561-569
Notes: a. Held at most Marine Biological Libraries
b. Free
c. 3
d. ICES area VII f

Reference Type: Journal Article

Record Number: 402
Author: Coull, KA; Johnstone, R; Rogers, SI
Year: 1998
Title: Fisheries Sensitivity Maps in British waters
Journal: Published and Distributed by UKOOA, UK.
Pages: 1-58
Notes: a. <http://www.cefas.co.uk/fsmaps/default.htm>
b. Free
c. 4
d. UK continental shelf

Reference Type: Journal Article
Record Number: 357
Author: Creech, S
Year: 1992
Title: A study of the population biology of *Atherina boyeri* Risso, 1810 in Aberthaw Lagoon, on the Bristol Channel, in South Wales
Journal: Journal of Fish Biology
Volume: 41
Pages: 277-286
Notes: a. Held at most Marine Biological Libraries
b. Free
c. 1
d. ICES area VII f
Reference Type: Journal Article

Record Number: 406
Author: Dare, PJ
Year: 1994
Title: Experiments to assess the relative dredging performances of research and commercial vessels for estimating the abundance of scallops (*Pecten maximus*) in the western English Channel fishery
Journal: Fisheries Research Technical Report, Directorate of Fisheries Research, Lowestoft
Volume: 96
Pages: 9
Notes: a. CEFAS Library, Lowestoft
b. Free
c. 4
d. ICES area VII e

Reference Type: Book Section
Record Number: 389
Author: Dare, PJ; Darby, CD; Durance, JA; Palmer, DW
Year: 1994
Title: The distribution of scallops, *Pecten maximus*, in the English Channel and Celtic Sea in relation to hydrographic and substrate features affecting larval dispersal and settlement
Editor: Bourne, NF; Bunting, BL; Townsend, LD
Book Title: Proceedings of the 9th International Pectinid Workshop, Nanaimo, B.C., Canada, April 22-27, 1993. Volume 2
Publisher: Canadian technical report of fisheries and aquatic sciences
Volume: 1994
Pages: 20-27
Notes: a. Held at CEFAS Library
b. Free

- c. 4
- d. ICES area VII e-h

Reference Type: Generic

Record Number: 400

Author: DEFRA

Year: 1972-present

Title: Fishing Activity Database

Notes: a. CEFAS, Lowestoft and DEFRA London (alan.cornell@defra.gsi.gov.uk)

b. Cost for analysis and interpretation

c. 5

d. ICES area VII a

Reference Type: Generic

Record Number: 401

Author: DEFRA

Year: 1989-present

Title: Overflight data of fishing activity in UK coastal waters

Notes: a. CEFAS, Lowestoft and DEFRA London

b. Cost for analysis and interpretation

c. 5

d. ICES area VII a

Reference Type: Journal Article

Record Number: 256

Author: Deniel, C.

Year: 1985

Title: Le trident *Raniceps raninus* (Linnaeus, 1758) (Teleosteen, Gadidae) de la cote nord du Finistere: Croissance en longueur et relation longueur-masse

Journal: Cybium

Volume: 9

Pages: 89-92

Keywords: Fishes, English Channel, Gadidae, tadpole fish

Notes: a. Held at most Marine Biological Libraries

b. Free

c. 3

d. ICES area VII d-e

Reference Type: Journal Article

Record Number: 51

Author: Du Buit, MH

Year: 1982

Title: Essai d'évaluation de la prédation de quelques téléostéens en Mer Celtique

Journal: Journal du Conseil International pour l'Exploration de la Mer

Volume: 40

Pages: 37-46

Keywords: Celtic Sea, diet, feeding habits, fishes

Notes: a. Held at most Marine Biological Libraries

b. Free

c. 2

d. ICES area VII g-j

Reference Type: Journal Article
Record Number: 53
Author: Du Buit, MH; Merlinat, F
Year: 1987
Title: Alimentation du merlan *Merlangius merlangus* L. en Mer Celtique
Journal: Revue des Travaux Institut des Pêches Maritimes
Volume: 49
Pages: 5-12
Keywords: Celtic Sea, diet, feeding habits, whiting
Notes: a. Held at most Marine Biological Libraries
b. Free
c. 2
d. ICES area VII g-j

Reference Type: Journal Article
Record Number: 52
Author: Du Buit, MH
Year: 1992
Title: Alimentation de la cardine, *Lepidorhombus whiffiagonis* en Mer Celtique
Journal: Cahiers de Biologie Marine
Volume: 33
Pages: 501-514
Keywords: Celtic Sea, diet, feeding habits, megrim
Notes: a. Held at most Marine Biological Libraries
b. Free
c. 2
d. ICES area VII g-j

Reference Type: Journal Article
Record Number: 80
Author: Ellis, JR; Shackley, SE
Year: 1995
Title: Notes on porbeagle sharks, *Lamna nasus*, from the Bristol Channel
Journal: Journal of Fish Biology
Volume: 46
Pages: 368-370
Keywords: Length-weight, sex ratio, diet, Lamnidae, Elasmobranchii
Notes: a. Held at most Marine Biological Libraries
b. Free
c. 3
d. ICES area VII f

Reference Type: Journal Article
Record Number: 83
Author: Ellis, JR; Shackley, SE
Year: 1997
Title: The reproductive biology of *Scyliorhinus canicula* in the Bristol Channel, U.K.
Journal: Journal of Fish Biology
Volume: 51
Pages: 361-372

Keywords: Elasmobranchii, Scyliorhinidae, reproduction, egg-laying, fecundity

Notes: a. Held at most Marine Biological Libraries

b. Free

c. 3

d. ICES area VII f

Reference Type: Journal Article

Record Number: 2

Author: Ellis, JR; Rogers, SI; Freeman, SM

Year: 2000

Title: Demersal assemblages in the Irish Sea, St George's Channel and Bristol Channel

Journal: Estuarine and Coastal Shelf Science

Volume: 51

Issue: 3

Pages: 299-315

Keywords: Irish Sea, St George's Channel, Bristol Channel, fishes, invertebrates, beam trawl

Notes: a. Held at most Marine Biological Libraries

b. Free

c. 3

d. ICES area VII f

Reference Type: Journal Article

Record Number: 374

Author: Findlay, M; Willerton, P

Year: 1996

Title: Relationship between shell length and water depth in the Guernsey ormer, *Haliotis tuberculata* L., population

Journal: Fisheries Management and Ecology

Volume: 3

Pages: 279-280

Notes: a. Held at most Marine Biological Libraries

b. Free

c. 3

d. ICES area VII e

Reference Type: Journal Article

Record Number: 84

Author: Goodwin, NB; Dare, PJ; Belson, SJ; Gunstone, KL; Ellis, JR; Rogers, SI

Year: 2001

Title: A catalogue of DEFRA historical Research Vessel data

Journal: CEFAS Science Series Technical Report

Volume: 112

Pages: 32

Notes: a. CEFAS Library

b. Free

c. 3

d. ICES area VII d-j

Reference Type: Journal Article

Record Number: 254

Author: Gray, MJ

Year: 1995
Title: The coastal fisheries of England and Wales, Part III: A review of their status 1992-1994
Journal: MAFF Fisheries Research Technical Report
Volume: 100
Pages: 99pp.
Keywords: Irish Sea, North Sea, English Channel, fisheries
Notes: a. CEFAS Library
b. Free
c. 4
d. ICES area VII d-j

Reference Type: Journal Article
Record Number: 373
Author: Grioche, A; Koubbi, P
Year: 1997
Title: A preliminary study of the influence of a coastal frontal structure on ichthyoplankton assemblages in the English Channel
Journal: ICES Journal of Marine Science
Volume: 54
Pages: 93-104
Notes: a. Held at most Marine Biological Libraries
b. Free
c. 3
d. ICES area VII d

Reference Type: Journal Article
Record Number: 371
Author: Grioche, A; Koubbi, P; Harlay, X
Year: 1999
Title: Spatial Patterns of Ichthyoplankton Assemblages Along the Eastern English Channel French Coast during Spring 1995
Journal: Estuarine, Coastal and Shelf Science
Volume: 49
Pages: 141-152
Notes: a. Held at most Marine Biological Libraries
b. Free
c. 3
d. ICES area VII d

Reference Type: Journal Article
Record Number: 376
Author: Haynes, GM; Nichols, JH
Year: 1994
Title: Pilchard (*Sardina pilchardus*, Walbaum) egg distribution in the English Channel from plankton surveys in 1978, 1981, 1988 and 1991
Journal: Journal of Plankton Research
Volume: 16
Pages: 771-782
Notes: a. Held at most Marine Biological Libraries
b. Free
c. 3
d. ICES area VII d-e

Reference Type: Journal Article

Record Number: 387

Author: Heipel, DA; Bishop, JDD; Brand, AR; Thorpe, JP

Year: 1998

Title: Population genetic differentiation of the great scallop *Pecten maximus* in western Britain investigated by randomly amplified polymorphic DNA

Journal: Marine Ecology Progress Series

Volume: 162

Pages: 163-171

Notes: a. Held at most Marine Biological Libraries

b. Free

c. 2

d. ICES area VII e

Reference Type: Journal Article

Record Number: 388

Author: Heipel, DA; Bishop, JDD; Brand, AR

Year: 1999

Title: Mitochondrial DNA variation among open-sea and enclosed populations of the scallop *Pecten maximus* in western Britain

Journal: Journal of the Marine Biological Association of the United Kingdom

Volume: 79

Pages: 687-695

Notes: a. Held at most Marine Biological Libraries

b. Free

c. 2

d. ICES area VII e

Reference Type: Journal Article

Record Number: 257

Author: Henderson, PA

Year: 1989

Title: On the structure of the inshore fish community of England and Wales

Journal: Journal of the Marine Biological Association of the United Kingdom

Volume: 69

Pages: 145-163

Notes: a. Held at most Marine Biological Libraries

b. Free

c. 3

d. ICES area VII f

Reference Type: Journal Article

Record Number: 258

Author: Henderson, PA; Holmes, RHA

Year: 1989

Title: Whiting migration in the Bristol Channel: A predator-prey relationship

Journal: Journal of Fish Biology

Volume: 34

Pages: 409-416

Keywords: Fishes, Gadidae, Bristol Channel

Notes: a. Held at most Marine Biological Libraries
b. Free
c. 3
d. ICES area VII f

Reference Type: Journal Article
Record Number: 259
Author: Henderson, PA; Holmes, RHA
Year: 1990
Title: Population stability over a ten-year period in the short-lived fish *Liparis liparis* (L.)
Journal: Journal of Fish Biology
Volume: 37
Pages: 605-615
Keywords: Fishes, Scorpaeniformes, Liparidae, sea-snail, Bristol Channel
Notes: a. Held at most Marine Biological Libraries
b. Free
c. 1
d. ICES area VII f

Reference Type: Journal Article
Record Number: 358
Author: Henderson, PA; Holmes, RHA
Year: 1991
Title: On the population dynamics of dab, sole and flounder within Bridgwater Bay in the lower Severn Estuary, England
Journal: Netherlands Journal of Sea Research
Volume: 27
Pages: 337-344
Notes: a. Held at most Marine Biological Libraries
b. Free
c. 3
d. ICES area VII f

Reference Type: Journal Article
Record Number: 260
Author: Henderson, PA; James, D; Holmes, RHA
Year: 1992
Title: Trophic structure within the Bristol Channel: Seasonality and stability in Bridgwater Bay
Journal: Journal of the Marine Biological Association of the United Kingdom
Volume: 72
Pages: 675-690
Keywords: Fishes, Bristol Channel
Notes: a. Held at most Marine Biological Libraries
b. Free
c. 3
d. ICES area VII f

Reference Type: Journal Article
Record Number: 353
Author: Henderson, PA; Seaby, RMH

Year: 1994
Title: On the factors influencing juvenile flatfish abundance in the lower Severn Estuary, England
Journal: Netherlands Journal of Sea Research
Volume: 32
Pages: 321-330
Notes: a. Held at most Marine Biological Libraries
b. Free
c. 3
d. ICES area VII f

Reference Type: Journal Article
Record Number: 261
Author: Henderson, PA; Seaby, RMH
Year: 1999
Title: Population stability of the sea snail at the southern edge of its range
Journal: Journal of Fish Biology
Volume: 54
Pages: 1161-1176
Keywords: Fishes, Scorpaeniformes, Liparidae, sea-snail, Bristol Channel
Notes: a. Held at most Marine Biological Libraries
b. Free
c. 1
d. ICES area VII f

Reference Type: Journal Article
Record Number: 384
Author: Holden, MJ; Williams, T
Year: 1976
Title: The biology, movements and population dynamics of bass, *Dicentrarchus labrax*, in English waters
Journal: Journal of the Marine Biological Association of the United Kingdom
Volume: 54
Pages: 91-107
Notes: a. Held at most Marine Biological Libraries
b. Free
c. 3
d. ICES area VII d-e

Reference Type: Journal Article
Record Number: 262
Author: Holmes, RHA; Henderson, PA
Year: 1990
Title: High fish recruitment in the Severn Estuary: The effect of a warm year?
Journal: Journal of Fish Biology
Volume: 36
Pages: 961-963
Keywords: Fishes, Bristol Channel, climate
Notes: a. Held at most Marine Biological Libraries
b. Free
c. 3
d. ICES area VII f

Reference Type: Journal Article
Record Number: 359
Author: Horwood, JW; Walker, MG
Year: 1990
Title: Determinacy of fecundity in sole (*Solea solea*) from the Bristol Channel
Journal: Journal of the Marine Biological Association of the United Kingdom
Volume: 70
Pages: 803-813
Notes: a. Held at most Marine Biological Libraries
b. Free
c. 3
d. ICES area VII f

Reference Type: Journal Article
Record Number: 354
Author: Horwood, JW
Year: 1993
Title: Fecundity and biomass of plaice (*Pleuronectes platessa* L.) in the northern Celtic Sea
Journal: ICES Journal of Marine Science
Volume: 50
Pages: 315-323
Notes: a. Held at most Marine Biological Libraries
b. Free
c. 3
d. ICES area VII f

Reference Type: Journal Article
Record Number: 355
Author: Horwood, J
Year: 1993
Title: The Bristol Channel sole (*Solea solea* (L.)): A fisheries case study
Journal: Advances in Marine Biology
Volume: 29
Pages: 215-368
Notes: a. Held at most Marine Biological Libraries
b. Free
c. 4
d. ICES area VII f

Reference Type: Journal Article
Record Number: 383
Author: Houghton, RG; Harding, D
Year: 1976
Title: The plaice of the English Channel: spawning and migration.
Journal: Journal du Conseil International pour l'Exploration de la Mer
Volume: 36
Pages: 229-239
Notes: a. Held at most Marine Biological Libraries
b. Free
c. 3

d. ICES area VII d

Reference Type: Journal Article

Record Number: 398

Author: ICES

Year: 1992

Title: Report of the Study Group on the Fecundity of sole and plaice in sub-areas IV, VII, and VIII.

Journal: ICES

Volume: C.M. 1992/G:16

Notes: grey literature, freely available from ICES.
extensive coverage of sole egg distributions.

Reference Type: Electronic Source

Record Number: 403

Author: IFREMER

Year: 1988-

Title: Channel Groundfish Survey

Notes: a. IFREMER, Boulogne-sur-Mer, France

b. Cost

c. 4

d. ICES area VII d

Reference Type: Journal Article

Record Number: 356

Author: Jennings, S; Pawson, MG

Year: 1992

Title: The origin and recruitment of bass, *Dicentrarchus labrax*, larvae to nursery areas

Journal: Journal of the Marine Biological Association of the United Kingdom

Volume: 72

Pages: 199-212

Notes: a. Held at most Marine Biological Libraries

b. Free

c. 4

d. ICES area VII f-g

Reference Type: Journal Article

Record Number: 407

Author: Johnson, PO

Year: 1977

Title: A review of spawning in the North Atlantic mackerel, *Scomber scombrus* L.

Journal: Fisheries Research Technical Report, Directorate of Fisheries Research, Lowestoft

Volume: 37

Pages: 1-22

Notes: a. CEFAS Library, Lowestoft

b. Free

c. 4

d. ICES area VII d-j

Reference Type: Journal Article

Record Number: 194
Author: Kaiser, MJ; Armstrong, PJ; Dare, PJ; Flatt, RP
Year: 1998
Title: Benthic communities associated with a heavily fishes scallop ground in the English Channel
Journal: Journal of the Marine Biological Association of the United Kingdom
Volume: 78
Pages: 1045-1059
Keywords: English Channel, benthos, communities, disturbance, long-term change
Notes: a. Held at most Marine Biological Libraries
b. Free
c. 3
d. ICES area VII e

Reference Type: Journal Article
Record Number: 34
Author: Kaiser, MJ; Rogers, SI; Ellis, JR
Year: 1999
Title: Importance of benthic habitat complexity for demersal fish assemblages
Journal: American Fisheries Society Symposium
Volume: 22
Pages: 212-223
Keywords: English Channel, beam trawl, fishes, invertebrates, assemblages
Notes: a. Held at most Marine Biological Libraries
b. Free
c. 4
d. ICES area VII d

Reference Type: Journal Article
Record Number: 390
Author: Lubet, P; Dare, P
Year: 1998
Title: Reproduction of the scallop off the coasts of Cornwall and S.W. England. Comparison with other parts of the species' range.
Journal: Haliotis
Volume: 27
Pages: 57-65
Notes: a. Held at most Marine Biological Libraries
b. Free
c. 4
d. ICES area VII e

Reference Type: Journal Article
Record Number: 386
Author: Macer, CT
Year: 1974
Title: The reproductive biology of the horse mackerel *Trachurus trachurus* (L.) in the North Sea and English Channel
Journal: Journal of Fish Biology
Volume: 6
Pages: 415-438
Notes: a. Held at most Marine Biological Libraries

- b. Free
- c. 3
- d. General

Reference Type: Journal Article

Record Number: 382

Author: Macer, CT

Year: 1977

Title: Some aspects of the biology of the horse mackerel (*Trachurus trachurus* (L.)) in waters around Britain

Journal: Journal of Fish Biology

Volume: 10

Pages: 51-62

Notes: a. Held at most Marine Biological Libraries

b. Free

c. 3

d. ICES area VII e

Reference Type: Journal Article

Record Number: 263

Author: Marchal, P; Horwood, J

Year: 1996

Title: Long-term targets for the Celtic Sea mixed-species multi-metiers fisheries

Journal: Aquatic Living Resources

Volume: 9

Pages: 81-94

Notes: a. Held at most Marine Biological Libraries

b. Free

c. 3

d. ICES area VII f-j

Reference Type: Book

Record Number: 69

Author: MBA

Year: 1957

Title: Plymouth Marine Fauna

Number of Volumes: 457

Edition: 3rd

Keywords: Western English Channel, invertebrates, fish

Notes: a. Held at most Marine Biological Libraries

b. Free

c. 3

d. ICES area VII f

Reference Type: Journal Article

Record Number: 211

Author: Mellon, C

Year: 1998

Title: Les stocks de poissons démersaux sous quota en Manche est et Mer du Nord

Journal: Cybium

Volume: 22

Pages: 357-369

Keywords: English Channel, fisheries

Notes: a. Held at most Marine Biological Libraries, Marine Biological Association

b. Free

c. 3

d. ICES area VII e

Reference Type: Journal Article

Record Number: 408

Author: Milligan, SP

Year: 1986

Title: Recent studies on the spawning of sprat (*Sprattus sprattus* L. in the English Channel

Journal: Fisheries Research Technical Report, Directorate of Fisheries Research, Lowestoft

Volume: 83

Pages: 1-18

Notes: a. CEFAS Library, Lowestoft

b. Free

c. 4

d. ICES area VII d-e

Reference Type: Journal Article

Record Number: 378

Author: Pawson, MG; Kelley, DF; Pickett, GD

Year: 1987

Title: The distribution and migrations of bass, *Dicentrarchus labrax* L., in waters around England and Wales as shown by tagging.

Journal: Journal of the Marine Biological Association of the United Kingdom

Volume: 67

Pages: 263-274

Notes: a. Held at most Marine Biological Libraries

b. Free

c. 4

d. ICES area VII d-f

Reference Type: Journal Article

Record Number: 218

Author: Pawson, MG

Year: 1995

Title: Biogeographical identification of English Channel fish and shellfish stocks

Journal: Fisheries Research Technical Report, Directorate of Fisheries Research, Lowestoft

Volume: 99

Pages: 1-72

Keywords: English Channel, fisheries

Notes: a. CEFAS Library

b. Free

c. 5

d. ICES area VII d-e

Reference Type: Journal Article

Record Number: 363

Author: Potter, IC; Claridge, PN

Year: 1985
Title: Seasonal catches, size and meristic data for sprat, *Sprattus sprattus* , in the Severn Estuary
Journal: Journal of the Marine Biological Association of the United Kingdom
Volume: 65
Pages: 667-675
Notes: a. Held at most Marine Biological Libraries
b. Free
c. 3
d. ICES area VII f

Reference Type: Journal Article
Record Number: 360
Author: Potter, IC; Gardner, DC; Claridge, PN
Year: 1988
Title: Age composition, growth, movements, meristics and parasites of the whiting, *Merlangius merlangus* , in the Severn Estuary and Bristol Channel.
Journal: Journal of the Marine Biological Association of the United Kingdom
Volume: 68
Pages: 295-313
Notes: a. Held at most Marine Biological Libraries
b. Free
c. 3
d. ICES area VII f

Reference Type: Journal Article
Record Number: 369
Author: Quero, J-C; Gueguen, J
Year: 1981
Title: The Rays of the Celtic Sea and the Bristol Channel. Abundance and Distribution
Journal: Science et Peche
Volume: 318
Pages: 1-22
Notes: a. Held at CEFAS Library
b. Free
c. 4
d. ICES area VII f

Reference Type: Journal Article
Record Number: 409
Author: Riley, JD; Symonds, DJ; Woolner, LE
Year: 1986
Title: Determination of the distribution of the planktonic and small demersal stages of fish in the coastal waters of England, Wales and adjacent areas between 1970 and 1984
Journal: Fisheries Research Technical Report, Directorate of Fisheries Research, Lowestoft
Volume: 84
Pages: 1-23
Notes: a. CEFAS Library, Lowestoft
b. Free
c. 3
d. ICES area VII d-f

Reference Type: Journal Article
Record Number: 335
Author: Rogers, SI and Millner, RS
Year: 1996
Title: factors affecting the annual abundance and regional distribution of English inshore demersal fish populations: 1973 to 1995
Journal: ICES Journal of Marine Science
Volume: 53
Pages: 1094-1112
Keywords: Long-term change, demersal fishes, North Sea, hydrography
Notes: a. Held at most Marine Biological Libraries
b. Free
c. 3
d. ICES area VII d

Reference Type: Journal Article
Record Number: 145
Author: Rogers, SI
Year: 1997
Title: A review of closed areas in the United Kingdom Exclusive Economic Zone
Journal: Scientific Series, Technical Report, CEFAS (Lowestoft)
Volume: 106
Pages: 20
Keywords: Closed areas, Irish Sea, Bristol Channel, North Sea, English Channel
Notes: a. CEFAS Library
b. Free
c. 4
d. ICES area VII d-f

Reference Type: Journal Article
Record Number: 224
Author: Rogers, SI; Rijnsdorp, AD; Damm, U; Vanhee, W
Year: 1998
Title: Demersal fish populations in the coastal waters of the UK and continental NW Europe from beam trawl survey data collected from 1990 to 1995
Journal: Journal of Sea Research
Volume: 39
Pages: 79-102
Keywords: Fishes, North Sea, Irish Sea, English Channel
Notes: a. Held at most Marine Biological Libraries
b. Free
c. 4
d. ICES area VII d-f

Reference Type: Journal Article
Record Number: 405
Author: Rogers, SI; Millner, RS; Mead TA
Year: 1998
Title: The distribution and abundance of young fish on the east and south coast of England (1981 to 1997).
Journal: CEFAS Science Series Technical Report

Volume: 108
Pages: 130pp.
Notes: a. CEFAS Library, Lowestoft
b. Free
c. 5
d. ICES area VII d

Reference Type: Journal Article
Record Number: 245
Author: Rogers, SI; Clark, KR; Reynolds, JD
Year: 1999
Title: The taxonomic distinctness of coastal bottom-dwelling fish communities of the Northeast Atlantic
Journal: Journal of Animal Ecology
Volume: 68
Pages: 769-782
Keywords: Fishes, North Sea, Irish Sea, English Channel
Notes: a. Held at most Marine Biological Libraries
b. Free
c. 4
d. ICES area VII d-f

Reference Type: Journal Article
Record Number: 246
Author: Rogers, SI; Maxwell, D; Rijnsdorp, AD; Damm, U; Vanhee, W
Year: 1999
Title: Fishing effects in Northeast Atlantic shelf seas: patterns in fishing effort, diversity and community structure IV. Can comparisons of species diversity be used to assess human impacts on coastal demersal fish faunas?
Journal: Fisheries Research
Volume: 40
Pages: 135-152
Keywords: Fishes, North Sea, Irish Sea, English Channel
Notes: a. Held at most Marine Biological Libraries
b. Free
c. 4
d. ICES area VII d-f

Reference Type: Journal Article
Record Number: 3
Author: Rogers, SI; Ellis, JR
Year: 2000
Title: Changes in the demersal fish assemblages of British coastal waters during the 20th century
Journal: ICES Journal of Marine Science
Volume: 57
Pages: 866-881
Keywords: Long-term change, Irish Sea, North Sea, English Channel, fishes, beam trawl, elasmobranchs
Notes: a. Held at most Marine Biological Libraries
b. Free
c. 4

d. ICES area VII d-f

Reference Type: Journal Article

Record Number: 372

Author: Sims, DW

Year: 1999

Title: Threshold foraging behaviour of basking sharks on zooplankton: life on an energetic knife-edge?

Journal: Proceedings of the Royal Society of London, Series B: Biological Sciences

Volume: 266

Pages: 1437-1443

Notes: a. Held at most Marine Biological Libraries

b. Free

c. 3

d. ICES area VII e

Reference Type: Journal Article

Record Number: 370

Author: Sims, DW

Year: 2000

Title: Can threshold foraging responses of basking sharks be used to estimate their metabolic rate?.

Journal: Marine Ecology Progress Series

Volume: 200

Pages: 289-296

Notes: a. Held at most Marine Biological Libraries

b. Free

c. 3

d. ICES area VII e

Reference Type: Journal Article

Record Number: 385

Author: Southward, AJ

Year: 1974

Title: Long term changes in abundance of eggs of the Cornish pilchard (*Sardina pilchardus* Walbaum) off Plymouth

Journal: Journal of the Marine Biological Association of the United Kingdom

Volume: 54

Pages: 641-649

Notes: a. Held at most Marine Biological Libraries

b. Free

c. 3

d. ICES area VII e

Reference Type: Journal Article

Record Number: 380

Author: Southward, AJ; Mattacola, AD

Year: 1980

Title: Occurrence of Norway pout, *Trisopterus esmarki* (Nilsson) and blue whiting, *Micromesistius poutassou* (Risso), in the western English Channel off Plymouth

Journal: Journal of the Marine Biological Association of the United Kingdom

Volume: 60
Pages: 39-44
Notes: a. Held at most Marine Biological Libraries
b. Free
c. 2
d. ICES area VII e

Reference Type: Journal Article
Record Number: 247
Author: Symonds, DJ; Rogers, SI
Year: 1995
Title: The influence of spawning and nursery grounds on the distribution of sole *Solea solea* (L.) in the Irish Sea, Bristol Channel and adjacent areas
Journal: Journal of Experimental Marine Biology and Ecology
Volume: 190
Pages: 243-261
Keywords: Fishes, Pleuronectiformes, Soleidae, Irish Sea, Bristol Channel, nursery grounds
Notes: a. Held at most Marine Biological Libraries
b. Free
c. 4
d. ICES area VII f

Reference Type: Journal Article
Record Number: 377
Author: Thompson, BM; Harrop, RT
Year: 1987
Title: The distribution and abundance of bass (*Dicentrarchus labrax*) eggs and larvae in the English Channel and southern North Sea
Journal: Journal of the Marine Biological Association of the United Kingdom
Volume: 67
Pages: 263-274
Notes: a. Held at most Marine Biological Libraries
b. Free
c. 4
d. ICES area VII d-e

Reference Type: Journal Article
Record Number: 375
Author: Thompson, BM; Bennett, AR; Bennett, DB
Year: 1995
Title: Estimation of the spatial distribution of spawning crabs (*Cancer pagurus* L.) using larval surveys in the English Channel
Journal: ICES Marine Science Symposium
Volume: 199
Pages: 139-150
Notes: a. Held at most Marine Biological Libraries
b. Free
c. 4
d. ICES area VII d-e

Reference Type: Journal Article

Record Number: 367
Author: Titmus, G; Claridge, PN; Potter, IC
Year: 1978
Title: Growth and abundance of O-group herrings, *Clupea harengus* L., in the Severn Estuary
Journal: Zoological Journal of the Linnaean Society
Volume: 64
Pages: 251-260
Notes: a. Held at most Marine Biological Libraries
b. Free
c. 3
d. ICES area VII f

Reference Type: Journal Article
Record Number: 264
Author: Vas, P
Year: 1990
Title: The shark catch of 1978 in the western English Channel
Journal: Environmental Biology of Fishes
Volume: 29
Pages: 315-317
Keywords: Elasmobranchii, Carcharhiniformes, Carcharhinidae, Prionace
Notes: a. Held at most Marine Biological Libraries
b. Free
c. 3
d. ICES area VII e

Reference Type: Journal Article
Record Number: 265
Author: Vas, P
Year: 1990
Title: The abundance of the blue shark, *Prionace glauca*, in the western English Channel
Journal: Environmental Biology of Fishes
Volume: 29
Pages: 209-225
Keywords: Elasmobranchii, Carcharhiniformes, Carcharhinidae, Prionace
Notes: a. Held at most Marine Biological Libraries
b. Free
c. 3
d. ICES area VII e

Reference Type: Journal Article
Record Number: 410
Author: Warnes, S. and Jones, B.W.
Year: 1995
Title: Species distributions from English Celtic Sea groundfish surveys, 1984 to 1991
Journal: Fisheries Research Technical Report, Directorate of Fisheries Research, Lowestoft
Volume: 98
Pages: 1-42
Notes: a. CEFAS Library, Lowestoft
b. Free
c. 5
d. ICES area VII e-j

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SW1P 3JR.

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