

**THE CENTRE FOR ENVIRONMENT, FISHERIES & AQUACULTURE
SCIENCE,
LOWESTOFT LABORATORY, LOWESTOFT, SUFFOLK, NR33 0HT.**

**2010 RESEARCH VESSEL PROGRAMME
REPORT: RV ENDEAVOUR: SURVEY 3/10**

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DURATION:

2 Feb – 15 Feb 2010

LOCALITY:

Celtic Sea (VII f, g, h)

Cefas Endeavour sailed from Belfast 0920 02 Feb 2010, a shakedown tow was undertaken at 1215 and Endeavour then proceeded to the main sampling area. Sampling began with the Portuguese High Headline Trawl (PHHT) at 0357 16 Feb and continued until 1930 08 Feb when the 4m beam trawl was swapped in.

In the early hours of 12 Feb the Ferrybox sea water supply pipe developed a leak mid ships and the system had to be shut down for repairs, it was re-started at 0900 13 Feb.

Fishing operations were completed at 1151 14 Feb and Endeavour steamed for Belfast docking at 0930 15 Feb 2010.

The new Scanmar Door Tilt sensors were used along with Trawl SPI, Headline Height and Door Spread to monitor the performance of the PHHT.

All catch, weight, length and biological data was collected using the EDC system and transferred directly to the server.

Damage, outside of expected wear and tear, occurred to the fishing gear on the following occasions;

Station, date and gear	Damage	Repair time
11, 4 Feb, PHHT	Headline parted at eye and split to selvedge	4 hrs
27, 7 Feb, PHHT	Came fast, split belly	1 hr
35, 8 Feb, PHHT	Wing out	Estimated 5hrs but swapped to 4m Beam to eliminate downtime and further risk of damage on hard ground.
58, 11 Feb approx posn: 50° 56' N 7° 32' W, 4m Beam	Severe damage to net on Beam No 1.	Not repairable at sea, swapped to Beam No 4

No downtime was incurred as a result of gear damage; all repairs were undertaken on steam to following station.

Weather halted fishing operations on the following occasions;

None

Other downtime

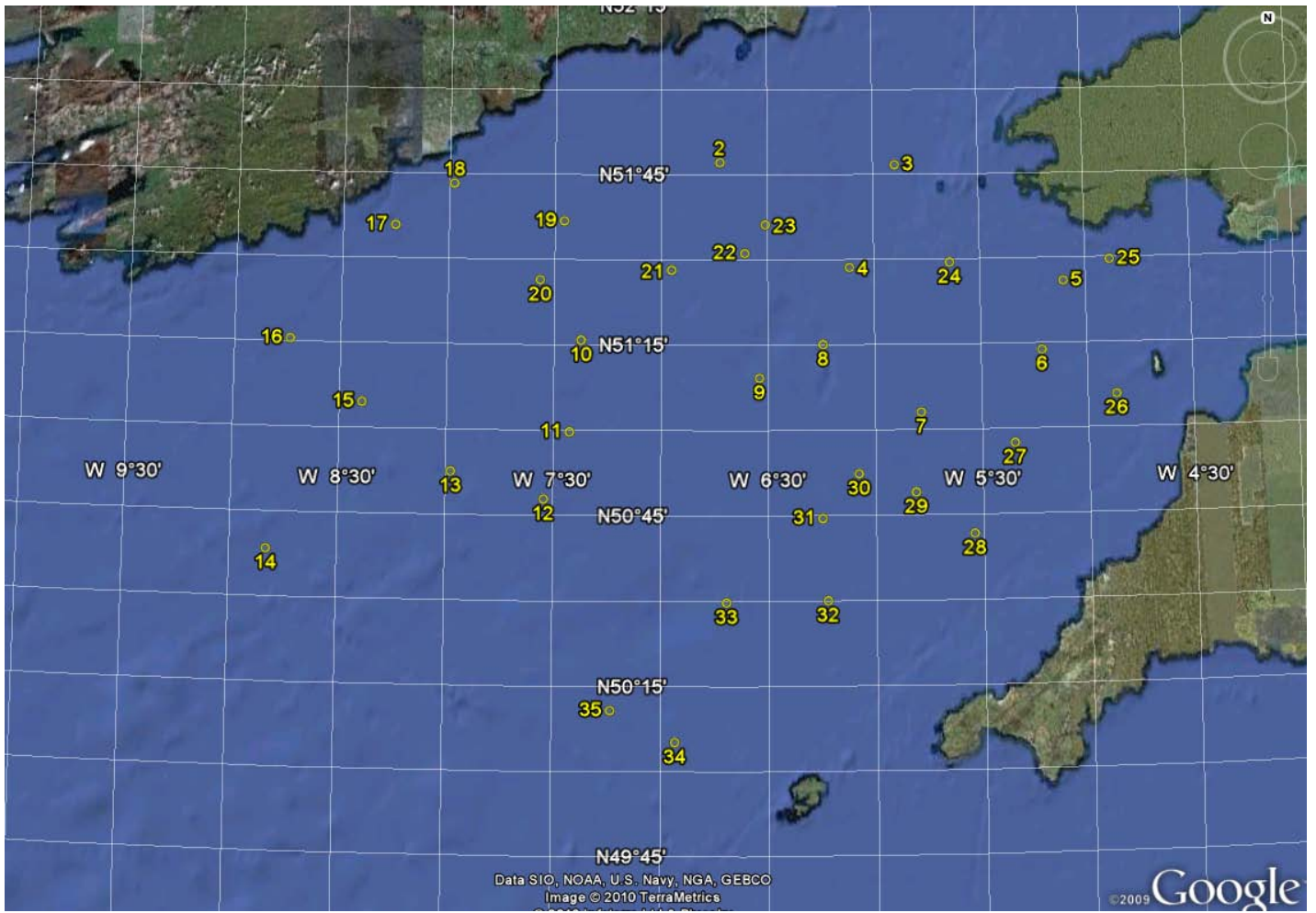
None

Summary of sampling achieved:

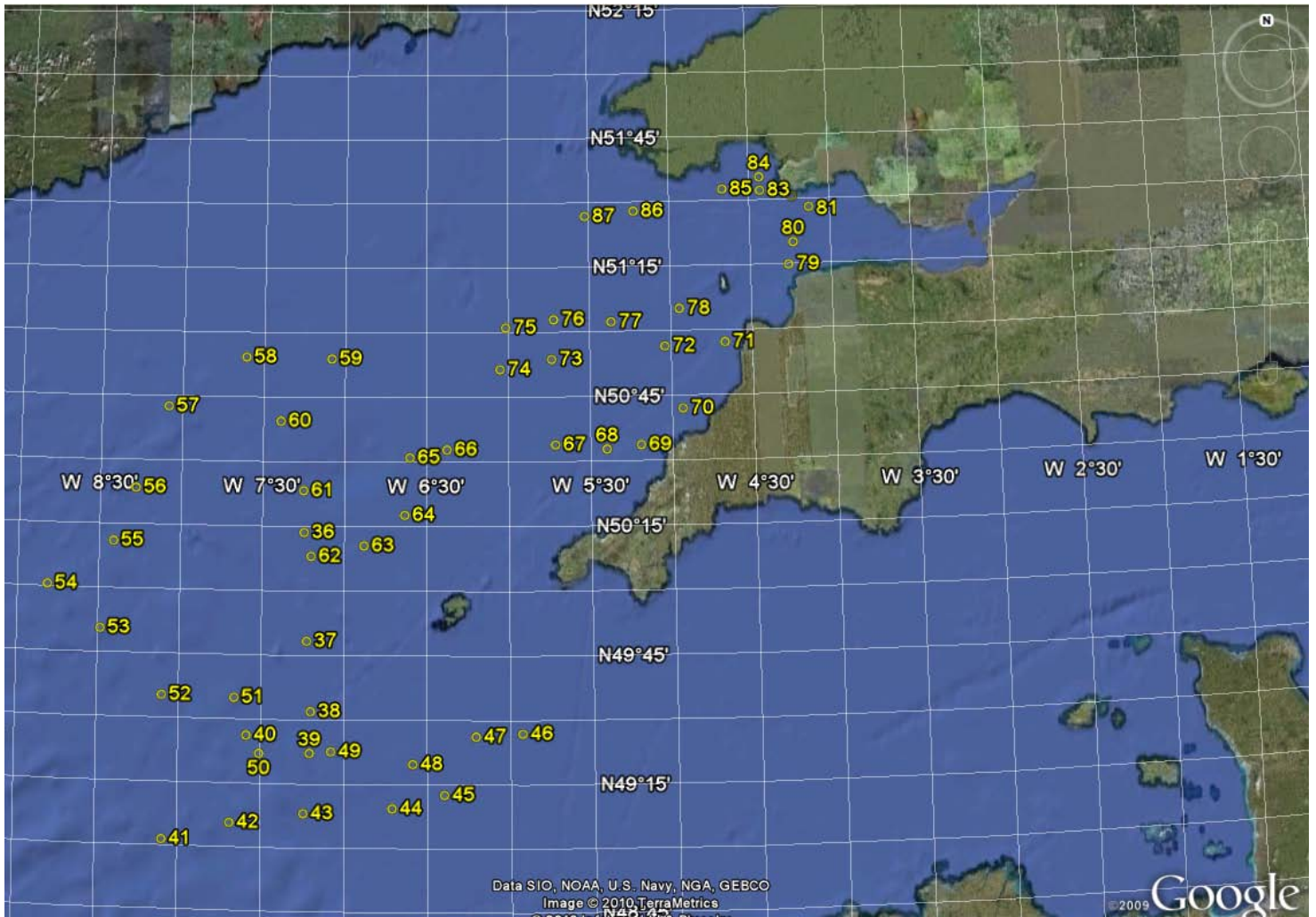
Gear	No of valid stations	Hours fished
PHHT	34	47.75
4m Beam	51	31.75
Total	85	

(1 invalid PHHT + 1 invalid 4m Beam)

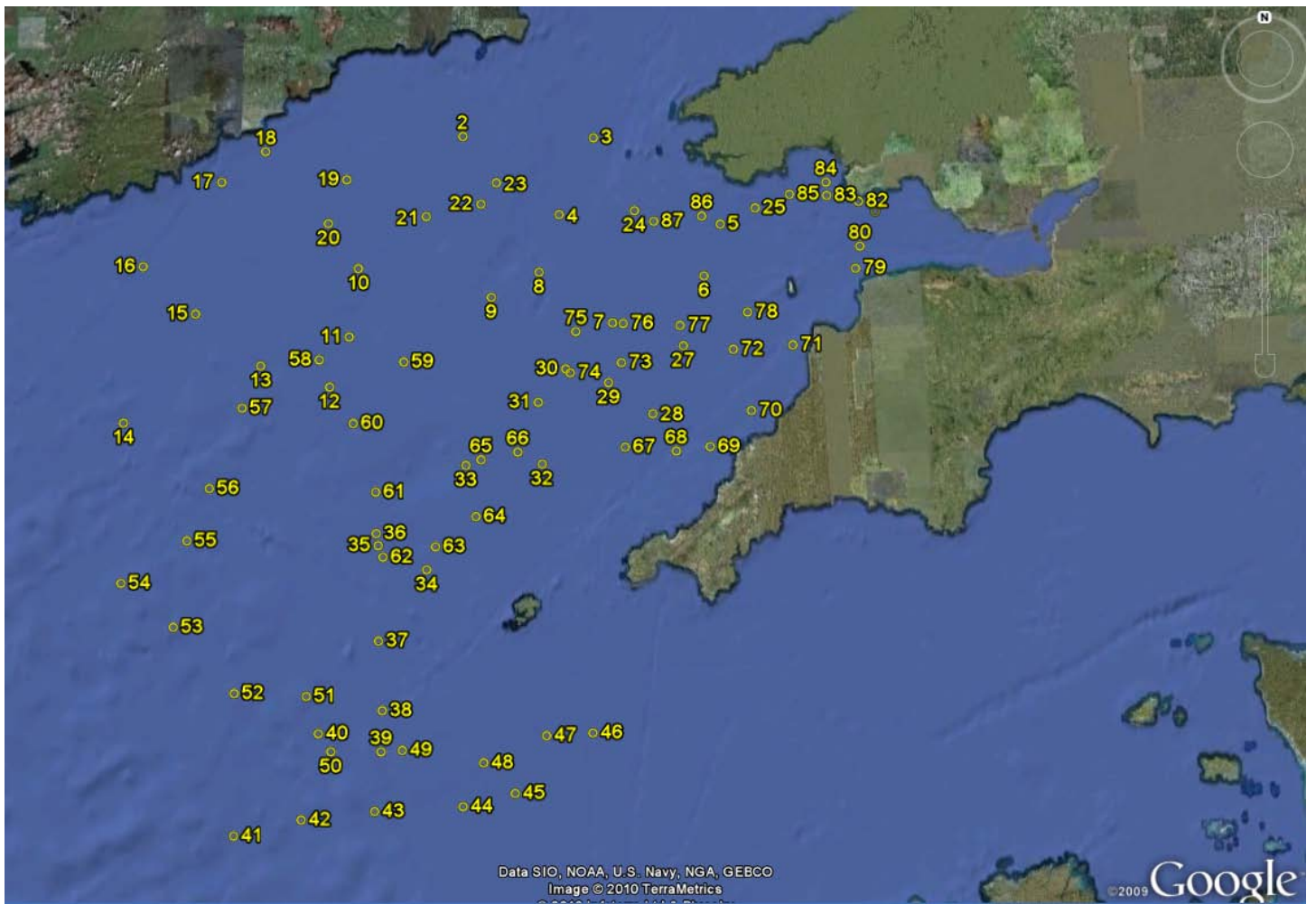
Station positions fished with PHHT



Stations Fished with 4m Beam Trawl



Stations fished, all gears



Length measurements by species (41281 total)

Species name	Species Code	Number of fish measured
Haddock	HAD	5498
Poor cod	POD	5101
Norway pout	NOP	3782
Whiting	WHG	3334
Sprat	SPR	2736
Blue whiting	WHB	2454
Lesser spotted dogfish	LSD	2014
Megrim	MEG	1840
Herring	HER	1661
Grey gurnard	GUG	1545
Dab	DAB	1316
Long rough dab	PLA	970
Argentines	ARG	790
Horse-mackerel (scad)	HOM	649
Mackerel	MAC	631
Thickback sole	TBS	614
Lemon sole	LEM	559
Common dragonet	CDT	539
Plaice	PLE	505
Norway lobster	NEP	501
Hake	HKE	430
Witch	WIT	374
Boar fish	BOF	351
Imperial scaldfish	ISF	329
Sole	SOL	289
Anglerfish (L. pisc)	MON	242
Great scallop	SCE	175
Red gurnard	GUR	163
Solenette	SOT	144
Cod	COD	143
Scald fish	SDF	137
Spotted dragonet	SDT	125
Spotted ray	SDR	112
Anglerfish (L. bude)	WAF	111
Silvery pout	SYP	78
Starry smooth hound	SDS	72
Tub gurnard	TUB	63
Smalleyed (painted) ray	PTR	59
Thornback ray (roker)	THR	54
Cuckoo ray	CUR	46
Northern squid	NSQ	45
Pogge (armed bullhead)	POG	42
Conger eel	COE	37
Pout (bib)	BIB	36
Pearlside	PLS	32

Spiny spider crab	SCR	32
Edible crab	CRE	31
Nurse hound	DGN	27
John dory	JOD	27
Sand sole	SOS	22
Norwegian topknot	NKT	21
European anchovy	ANE	19
Smooth hound	SMH	16
Shore rockling	SRR	15
Northern rockling	NNR	14
Squid		158
Three-bearded rockling	TBR	14
Goldsinny	GDY	13
Spurdog	DGS	10
Flounder	FLE	10
Common ling	LIN	10
Brill	BLL	9
Stone crab	LDM	9
Ekstroms topknot	EKT	8
Greater forkbeard	GFB	8
Lesser weever fish	WEL	8
Skate	SKT	7
Lobster	LBE	5
Four spot megrim	LBI	5
Shagreen ray	SHR	5
Turbot	TUR	5
Blonde ray	BLR	4
European seabass	ESB	4
Four-bearded rockling	FRR	4
Streaked gurnard	GUS	3
Gobies	POM	3
Butterfly blenny	BBY	2
Viviparus blenny	ELP	2
Sandeel	MSE	2
Red mullet	MUR	2
Pollack	POL	2
Cuckoo wrasse	CUW	1
Blackmouthed dogfish	DBM	1
Frie's goby	FSG	1
Garfish	GAR	1
Great sandeel	GSE	1
Lesser forkbeard	LFB	1
Lumpsucker	LUM	1
Montague's seasnail	MSS	1
Pilchard	PIL	1
Red bandfish	RPF	1
Sea snail	SSL	1
Greater weever fish	WEG	1

**Full biological sampling
(numbers of individuals):**

Species Code	Number sampled
MEG	1608
POD	1276
HAD	1177
WHG	938
GUG	568
WHB	568
LEM	456
NOP	435
DAB	385
PLE	354
HKE	352
TBS	295
SOL	273
MON	228
WIT	212
COD	143
GUR	138
WAF	110
SDR	96
PTR	58
THR	55
CUR	47
COE	37
BIB	34
JOD	21
BLL	9
DGS	8
LIN	8
GFB	7
SKT	6
SHR	5
TUR	5
BLR	4
ESB	3
MUR	2
POL	2
Total	9923

**Length/Weight sampling undertaken in addition to the above
(numbers of individuals, species > 50 individuals sampled)**

Species code	Number of individuals sampled
SPR	1048
LSD	970
HER	752
MAC	528
PLA	425
HOM	395
NEP	306
CDT	304
ISF	302
ARG	275
BOF	239
SOT	189
ATS	110
SDT	107
SDF	91
SCE	67
SDS	60
SYP	59
POD	59
TUB	56
Total	6830

Work completed in addition to the DCR sampling

Fish samples were collected for P Rumney as part of the RAD monitoring program.

Photographs were collected of Plaice and Sole maturity stages for ICES WGBEAM.

Enhancements were made to the Scanmar logging, Deckmaster, EDC and Fishing Survey software systems to eliminate known issues and incorporate additional functionality.

Cetacean sightings were recorded on the bridge log and will be submitted to the interested groups(SMRU, SeaWatch etc).

My thanks go to the officers and crew of Cefas Endeavour and the scientific staff for their hard work, commitment and good humour during the cruise.

Richard Ayers
(Scientist in Charge)

15-02-2010