



## LOBSTER “V”- NOTCHING REPORT

# 2010

## FOREWORD

The 2010 Lobster “V”-Notching Scheme started on Thursday 1<sup>st</sup> July 2010 and was completed by Wednesday 18<sup>th</sup> August. In total 1,246 female lobsters were released back into the sea. A total of 16 separate release sites were used throughout the Committee/Authority’s 5 sub sectors on 7 separate patrol days using either the Committee/Authority’s patrol vessel St Oswald or Bravo 1, the shore based RIB.

The total cost for lobsters in 2010 came to £10,887.50 with the majority of the lobsters being purchased from Berwick Shellfish Company with the remainder from Blyth Fish Ltd. As for preceding years the v-notching programme would not be able to continue without help from wholesalers. The quality of the lobsters purchased this year from these wholesalers was excellent and there were no reported fatalities in transportation or when lobsters were released back into the sea.

Once again, we have had and are still receiving donations from various fishermen within the Committee/Authority district which is of course a great help towards the overall cost of the scheme although the same fishermen would appear to contributing each year.

***The Committee/Authority would like to express sincere gratitude to all those organisations and individuals who donated financially and gave their valuable time to the scheme in the past year. Their support is invaluable and has helped to ensure the continuing success of the scheme.***

# INTRODUCTION

For the benefit of those unfamiliar with **European Lobster (*Homarus gammarus*)** here are some interesting lobster facts:

Lobsters are enclosed in a hard, rigid exoskeleton or shell. They grow in length by shedding their exoskeleton a process known as moulting. During each moult the carapace (body) length typically increases by 10 to 15%. The new exoskeleton is expanded and stretched when it is still soft by the lobster taking in water and excreting it into the body tissue. The shell then hardens over a period of days and the fluid is gradually replaced by extra body tissue.

Lobsters mate in early summer when hard shelled males mate with newly moulted females. Egg production is dependent on the size of the lobster. An immature female can lay 3-5,000 eggs, whereas a larger more mature female can lay 20,000 eggs, which the female will carry for approximately 11 months. Survival rates of juveniles can be low and in some cases only 1 in 20,000 will make it to maturity. A typical lobster embryo moults 35 times inside the egg before hatching, releasing the match head larvae into the sea. Lobster larvae will spend 3-4 weeks close to the surface as part of the free-floating plankton before settling on the seabed. During this stage the larvae complete another four moults, growing to approximately 12 mm. Young lobsters can moult up to 25 times in the first five years, although adults moult less frequently and large older ones tend to moult as little as once every two years. For the first few years lobsters usually remain in holes or crevices in the sea floor, safe from predation by fish and crabs. It is only when they reach around 40 mm carapace (body) length that they will start to move about and forage for food.

Lobsters are solitary, nocturnal and territorial. They live in depths of up to 150 m, though they are rarely found deeper than 50 m. They have a typical home range of 2 km and are not a prominent feature in the fishery at winter, when their feeding habit is reduced as their metabolic rate slows due to lower sea temperatures.

This report contains summary information of all v-notching work undertaken in 2010.

The scheme is now in its eleventh year. 1,246 mature egg-bearing females were v-notched and returned back to the fishery in 2010

A v-notch takes at least two castings (approximately 2 years) to grow out, thus enabling each notched female to potentially release two clutches of eggs before being eligible for capture again. In order to protect v-notched lobsters, the Committee/Authority has a byelaw (Byelaw No. 6) prohibiting the landing of V-notched lobsters. It is also an offence to "mutilate a lobster", meaning the removal of any part of a lobster tail that could disguise a v-notch. V-notching is carried out on alternate uropods (inner tail flap) adjacent to the telson (centre flap) every year - one year on the left, the next on the right and so on. This enables the officers to broadly identify the rate of notch loss yearly, however it is difficult to assess precisely the number of offspring that will be produced, as survival rates are governed by a large range of factors.

Since the start of the scheme the Committee/Authority has had positive feedback throughout the district from fishermen who claim that the number of immature lobsters has increased, which can only bode well for the future of the fisheries, since

the main reason for the v-notching scheme is to maintain and enhance healthy lobster stocks within the Committee/Authority District.

To summarise activity for 2010, 1,246 mature egg-bearing female lobsters were purchased and released on various suitable grounds throughout the Committee/Authority's District. The lobsters were released on 7 different dates on 16 release tracks from either the patrol vessel, St Oswald or the shore-based RIB, Bravo 1.

# PURCHASE AND TRANSPORTATION

In 2010 all the lobsters purchased from either Berwick Shellfish Company or Blyth Fish Ltd were collected using the Committee's Land Rover or one of the RIBs (Bravo1/Delta1). Once collected the lobsters were either taken to the St Oswald or released when Bravo 1 was launched. If delivered to the St Oswald, the lobsters are kept in a holding tank to keep them in top condition until they are at the designated release site.

Mileage has been kept down to the minimum by trying to purchase more lobsters per release.

During transportation, transfers and releases no known mortalities of animals were detected.

Summaries of Land rover mileages, RIB and Patrol Vessel hours plus fuel hours are reported separately.

**Table re. Purchase of Lobsters 2010**

Invoice date	Order weight	Price per kg	Invoice total
1 July 2010	174.90	£11.00	£1,923.90
28 July 2010	255.80	£12.00	£3,069.60
30 July 2010	42.50	£12.00	£510.00
6 August 2010	197.00	£12.00	£2,364.00
11 August 2010	35.00	£8.00	£280.00
18 August 2010	9.50	£8.00	£76.00
18 August 2010	222.00	£12.00	£2,664.00
	936.70		£10,887.50

Total weight purchased		936.70 kg
Overall cost	=	£10,887.50
Average cost per kilo	=	£10.71

## 2010 LOBSTER “V” NOTCHING SCHEME

Record of :- Landrover Mileage - RIB Hours – Patrol Vessel Hours – Man Hours

Landrover					RIB			Patrol Vessel		
Date	Mileage	Hours	No. of Officers	Man Hours	Hours	No. of Officers	Man Hours	Hours	No. of Officers	Man Hours
1 July 2010	150	4	1	4	2	2	4	8	4	32
28 July 2010	150	4	1	4	1	2	2	9	5	45
30 July 2010	30	4	1	4	4	4	16			
6 August 2010	150	4	1	4	1	2	2	9	4	36
11 August 2010					1	2	2	5	5	25
17 August 2010					1	2	2	4	4	16
18 July 2010	150	6	1	6	4	3	12			
<b>TOTAL</b>	<b>630</b>	<b>22</b>	<b>5</b>	<b>22</b>	<b>14</b>	<b>17</b>	<b>40</b>	<b>35</b>	<b>22</b>	<b>154</b>

Landrover petrol costs

RIB petrol costs

P/V diesel costs

Total man hours

630 miles @ 25 mile per gallon = 25.2 gals @ £5.94 = £149.68

14 hours @ 5 gals per hour = 70 gals @ £5.80 per gal = £406.56

35 hours @ 25 gals per hour = 875 gals @ £3.07 = £2,686.25

216 hours @ £17 per hour = £3,672.00

Direct and indirect costs incurred by Committee/Authority = £6,914.49

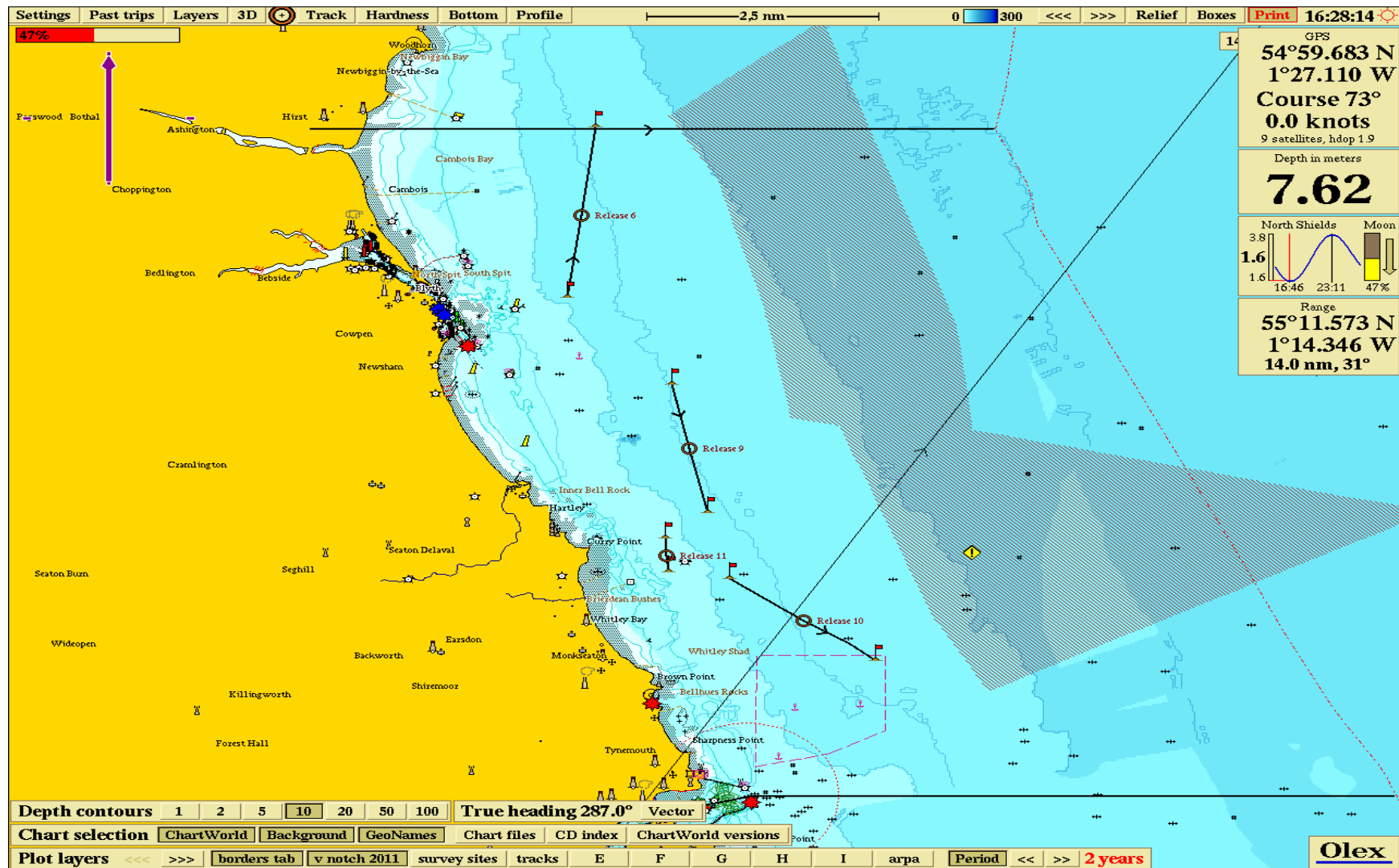
## **APPENDICES**

- Sector 1 - Tyne to Wansbeck**
- Sector 2 - Wansbeck to Amble**
- Sector 3 - Amble to Embleton**
- Sector 4 - Embleton to North of Farnes**
- Sector 5 - North of Farnes to Border**

# **Sector 1**

## **Tyne to Wansbeck**





**LOBSTER 'V' NOTCH RECORDING SHEET**

<b>RELEASE NUMBER</b>	<b>6</b>	<b>RELEASE SECTOR</b>	<b>1</b>
<b>DATE</b>	<b>30/07/2010</b>		
<b>START RELEASE</b>	<b>55-07.66</b>	<b>001-27.50</b>	
<b>END RELEASE</b>	<b>55-10.03</b>	<b>001-26.97</b>	

Lobster Size Range (mm)	Development of Eggs		TOTAL
	Coloured green/black	Eggs eyed/hatching	
87-88	4	5	9
88-89	2	4	6
89-90	2	2	4
90-91	7	5	12
91-92	5	6	11
92-93	8	2	10
93-94	4	1	5
94-95	7	1	8
95-96	1	4	5
96-97			
97-98	2		2
98-99	2		2
99-100			
100-101			
101-102	1	1	2
102-103			
103-104	1	1	2
104-105	1		1
105-106	1		1
106-107			
107-108			
108-109			
109-110			
110-111	2		2
111-112			
112-113			
113-114	1		1
114-115			
115-116			
116-117			
117-118			
118-119			
119-120			
120-121			
121-122			
122-123			
123-124			
124-125		1	1
<b>TOTAL</b>	<b>51</b>	<b>33</b>	<b>84</b>

**LOBSTER 'V' NOTCH RECORDING SHEET**

<b>RELEASE NUMBER</b>	<b>9</b>	<b>RELEASE SECTOR</b>	<b>1</b>
<b>DATE</b>	<b>06/08/2010</b>		
<b>START RELEASE</b>	<b>55-06.46</b>	<b>001-25.54</b>	
<b>END RELEASE</b>	<b>55-04.68</b>	<b>001-24.87</b>	

Lobster Size Range (mm)	Development of Eggs		TOTAL
	Coloured green/black	Eggs eyed/hatching	
87-88	1	1	2
88-89			
89-90	1	1	2
90-91			
91-92	3		3
92-93	3	4	7
93-94	2	1	3
94-95	4		4
95-96	1		1
96-97	2		2
97-98	1		1
98-99			
99-100		2	2
100-101	1	2	3
101-102	4	2	6
102-103	1		1
103-104	2		2
104-105	1		1
105-106	2		2
106-107	2		2
107-108			
108-109	1		1
109-110	1		1
110-111			
111-112			
112-113			
113-114	1	1	2
114-115			
115-116			
116-117			
117-118			
118-119			
119-120	1		1
120-121			
121-122			
122-123			
123-124			
124-125	1		1
<b>TOTAL</b>	<b>36</b>	<b>14</b>	<b>50</b>

**LOBSTER 'V' NOTCH RECORDING SHEET**

<b>RELEASE NUMBER</b>	<b>10</b>	<b>RELEASE SECTOR</b>	<b>1</b>
<b>DATE</b>	<b>11/08/2010</b>		
<b>START RELEASE</b>	<b>55-03.77</b>	<b>001-24.47</b>	
<b>END RELEASE</b>	<b>55-02.63</b>	<b>001-21.71</b>	

Lobster Size Range (mm)	Development of Eggs		TOTAL
	Coloured green/black	Eggs eyed/hatching	
87-88	6		6
88-89	4	1	5
89-90	4	1	5
90-91	4		4
91-92	10		10
92-93	2		2
93-94	4		4
94-95	5		5
95-96	1		1
96-97	2		2
97-98			
98-99			
99-100	1		1
100-101	2		2
101-102	3		3
102-103	2		2
103-104	1		1
104-105			
105-106			
106-107	1		1
107-108			
108-109	1		1
109-110			
110-111	1		1
111-112			
112-113			
113-114			
114-115			
115-116			
116-117			
117-118			
118-119			
119-120			
120-121			
121-122			
122-123			
123-124			
124-125			
<b>TOTAL</b>	<b>54</b>	<b>2</b>	<b>56</b>

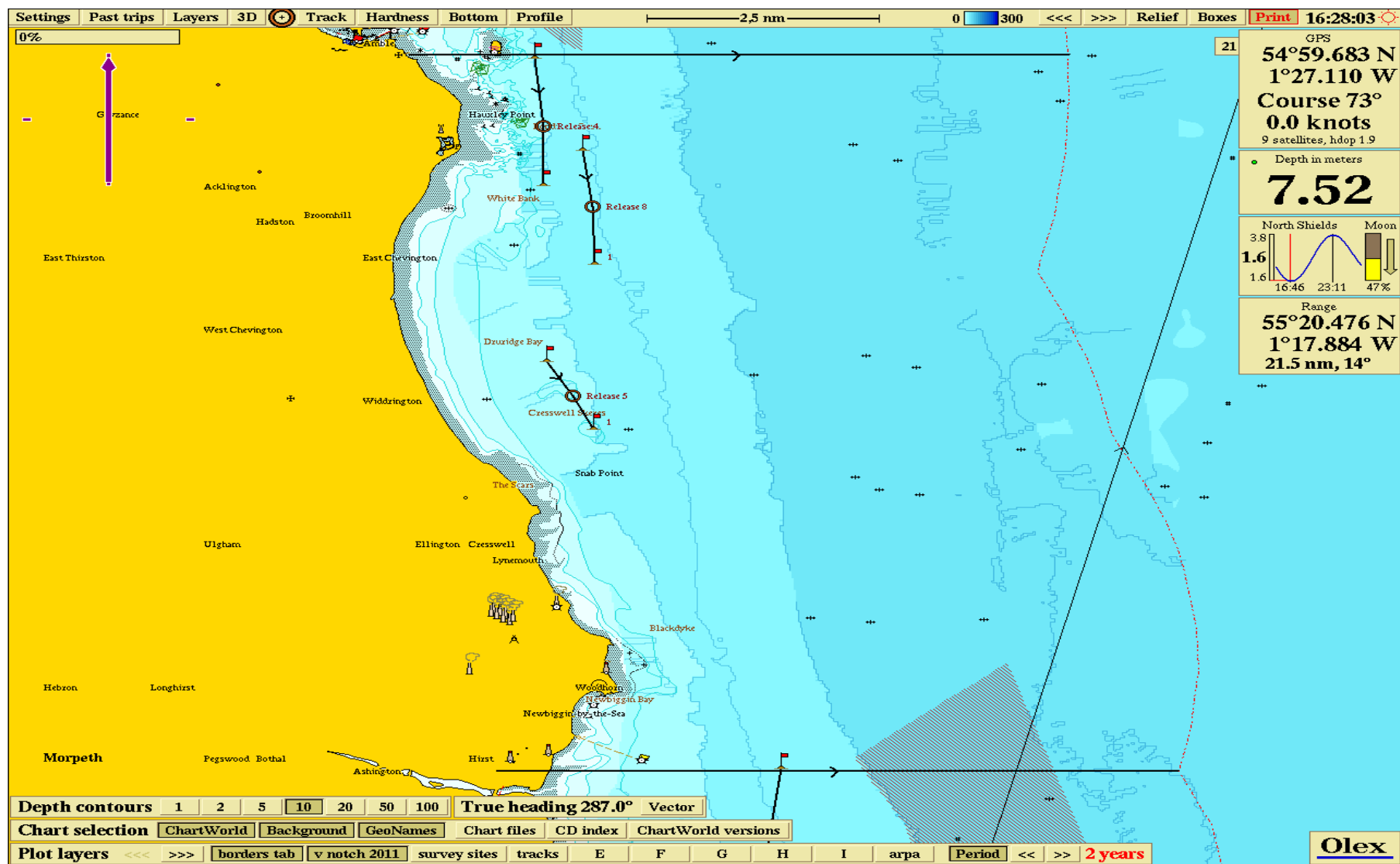
**LOBSTER 'V' NOTCH RECORDING SHEET**

<b>RELEASE NUMBER</b>	<b>11</b>	<b>RELEASE SECTOR</b>	<b>1</b>
<b>DATE</b>	<b>17/08/2010</b>		
<b>START RELEASE</b>	<b>55-04.33</b>	<b>001-25.66</b>	
<b>END RELEASE</b>	<b>55-03.86</b>	<b>001-25.61</b>	

Lobster Size Range (mm)	Development of Eggs		TOTAL
	Coloured green/black	Eggs eyed/hatching	
87-88	2		2
88-89			
89-90			
90-91	1		1
91-92	4		4
92-93	3		3
93-94	1		1
94-95	1		1
95-96			
96-97			
97-98			
98-99			
99-100			
100-101			
101-102			
102-103			
103-104			
104-105	1		1
105-106			
106-107			
107-108			
108-109			
109-110			
110-111			
111-112			
112-113			
113-114	1		1
114-115			
115-116			
116-117			
117-118			
118-119	1		1
119-120			
120-121			
121-122			
122-123			
123-124			
124-125			
<b>TOTAL</b>	<b>15</b>		<b>15</b>

## **Sector 2**

### **Wansbeck to Amble**



**LOBSTER 'V' NOTCH RECORDING SHEET**

<b>RELEASE NUMBER</b>	4	<b>RELEASE SECTOR</b>	2
<b>DATE</b>	28/07/2010		
<b>START RELEASE</b>	55-19.95	001-31.61	
<b>END RELEASE</b>	55-18.17	001-25.61	

Lobster Size Range (mm)	Development of Eggs		TOTAL
	Coloured green/black	Eggs eyed/hatching	
87-88	2	2	4
88-89	3	1	4
89-90	4	3	7
90-91	5	1	6
91-92	3		3
92-93	9		9
93-94	6	2	8
94-95	4	1	5
95-96	5		5
96-97	3		3
97-98	7	2	9
98-99			
99-100	1		1
100-101	6		6
101-102			
102-103	1	1	2
103-104	1		1
104-105			
105-106	2	1	3
106-107			
107-108	2		2
108-109			
109-110	1		1
110-111	6		6
111-112	2		2
112-113	2		2
113-114	2		2
114-115			
115-116	2		2
116-117	1		1
117-118			
118-119	1		1
119-120	1		1
120-121	1		1
121-122			
122-123			
123-124			
124-125	2	1	3
<b>TOTAL</b>	<b>85</b>	<b>15</b>	<b>100</b>



**LOBSTER 'V' NOTCH RECORDING SHEET**

<b>RELEASE NUMBER</b>	5	<b>RELEASE SECTOR</b>	2
<b>DATE</b>	28/07/2010		
<b>START RELEASE</b>	55-15.72	001-31.39	
<b>END RELEASE</b>	55-14.77	001-30.50	

Lobster Size Range (mm)	Development of Eggs		TOTAL
	Coloured green/black	Eggs eyed/hatching	
87-88	3		3
88-89			
89-90	5	1	6
90-91	5	1	6
91-92			
92-93	4		4
93-94	3	1	4
94-95	3	3	6
95-96	6	1	7
96-97	1		1
97-98	4	1	5
98-99	2		2
99-100	2	1	3
100-101	7		7
101-102	2		2
102-103	9		9
103-104			
104-105	2		2
105-106	4	1	5
106-107	3	1	4
107-108	3	2	5
108-109	2		2
109-110	2		2
110-111	5		5
111-112			
112-113	2		2
113-114			
114-115			
115-116	2	1	3
116-117			
117-118			
118-119			
119-120			
120-121	1	1	2
121-122			
122-123	1		1
123-124			
124-125	1		1
<b>TOTAL</b>	<b>84</b>	<b>15</b>	<b>99</b>

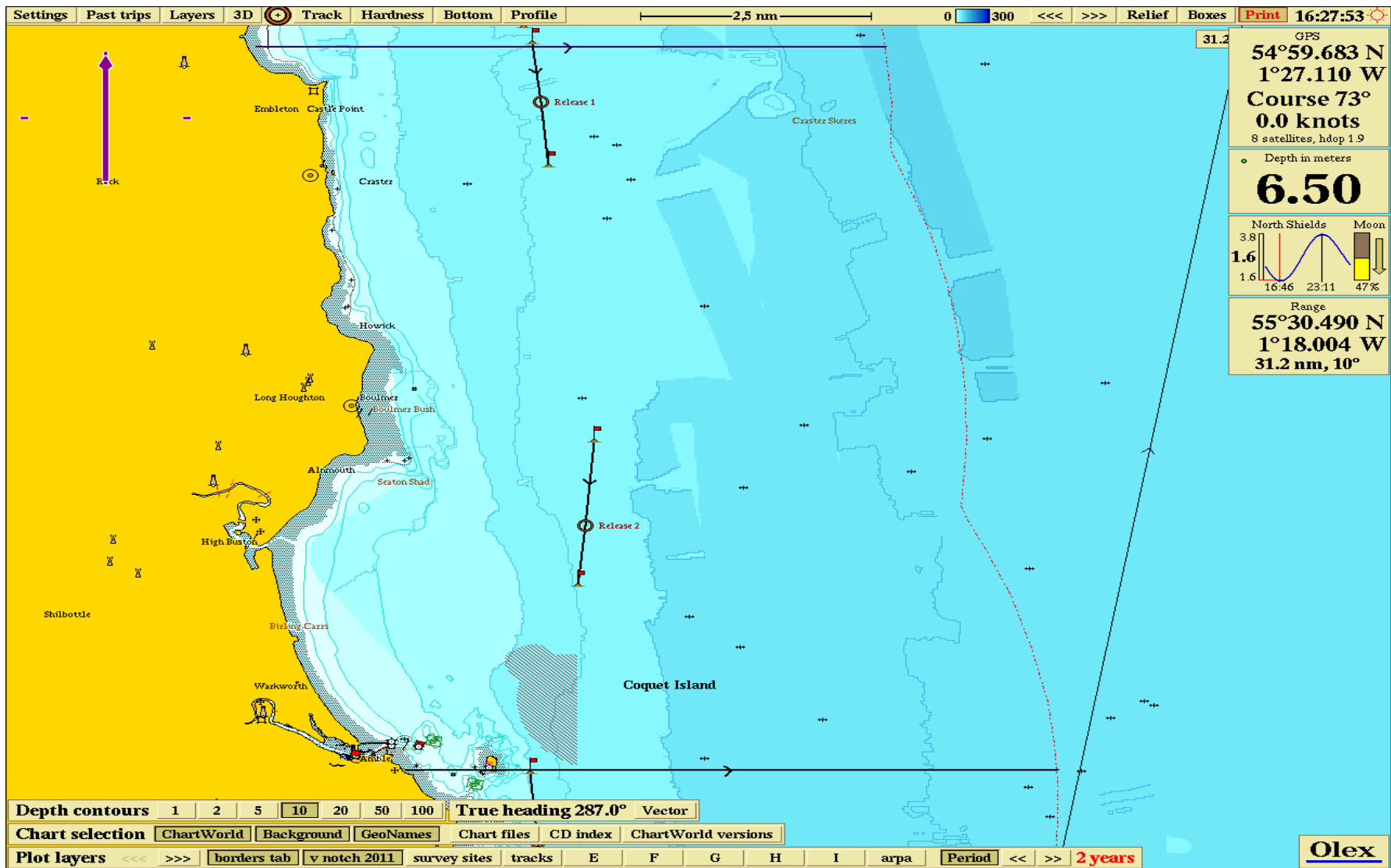
**LOBSTER 'V' NOTCH RECORDING SHEET**

<b>RELEASE NUMBER</b>	<b>8</b>	<b>RELEASE SECTOR</b>	<b>2</b>
<b>DATE</b>	<b>06/08/2010</b>		
<b>START RELEASE</b>	<b>55-18.66</b>	<b>001-30.70</b>	
<b>END RELEASE</b>	<b>55-17.07</b>	<b>001-30.48</b>	

Lobster Size Range (mm)	Development of Eggs		TOTAL
	Coloured green/black	Eggs eyed/hatching	
87-88		1	1
88-89			
89-90	2		2
90-91	2		2
91-92	1		1
92-93	1	2	3
93-94		1	1
94-95		1	1
95-96	1	1	2
96-97	1	1	2
97-98	1	1	2
98-99			
99-100		2	2
100-101	1	1	2
101-102	1		1
102-103			
103-104	3		3
104-105			
105-106	1		1
106-107	1	1	2
107-108	1		1
108-109	1	1	2
109-110	1		1
110-111	3		3
111-112	4	1	5
112-113			
113-114			
114-115	1		1
115-116		1	1
116-117	3	1	4
117-118			
118-119			
119-120	1		1
120-121	1		1
121-122			
122-123			
123-124			
124-125	2		2
<b>TOTAL</b>	<b>34</b>	<b>16</b>	<b>50</b>

## **Sector 3**

### **Amble to Embleton**



**LOBSTER 'V' NOTCH RECORDING SHEET**

<b>RELEASE NUMBER</b>	<b>1</b>	<b>RELEASE SECTOR</b>	<b>3</b>
<b>DATE</b>	<b>01/07/2010</b>		
<b>START RELEASE</b>	<b>55-30.01</b>	<b>001-31.57</b>	
<b>END RELEASE</b>	<b>55-28.35</b>	<b>001-31.21</b>	

Lobster Size Range (mm)	Development of Eggs		TOTAL
	Coloured green/black	Eggs eyed/hatching	
87-88	2	11	13
88-89		2	2
89-90	3	4	7
90-91	3	11	14
91-92	1	5	6
92-93	2	4	6
93-94	2	4	6
94-95	1	5	6
95-96	2	2	4
96-97		2	2
97-98		1	1
98-99	1	1	2
99-100		3	3
100-101	3	2	5
101-102	1	1	2
102-103	2	1	3
103-104	1		1
104-105	3	1	4
105-106		1	1
106-107			
107-108	1	1	2
108-109			
109-110	3	2	5
110-111		4	4
111-112	2	2	4
112-113		1	1
113-114		1	1
114-115	1	1	2
115-116			
116-117	1	1	2
117-118			
118-119			
119-120		1	1
120-121	1	1	2
121-122		3	3
122-123			
123-124		1	1
124-125	1	1	2
<b>TOTAL</b>	<b>37</b>	<b>81</b>	<b>118</b>

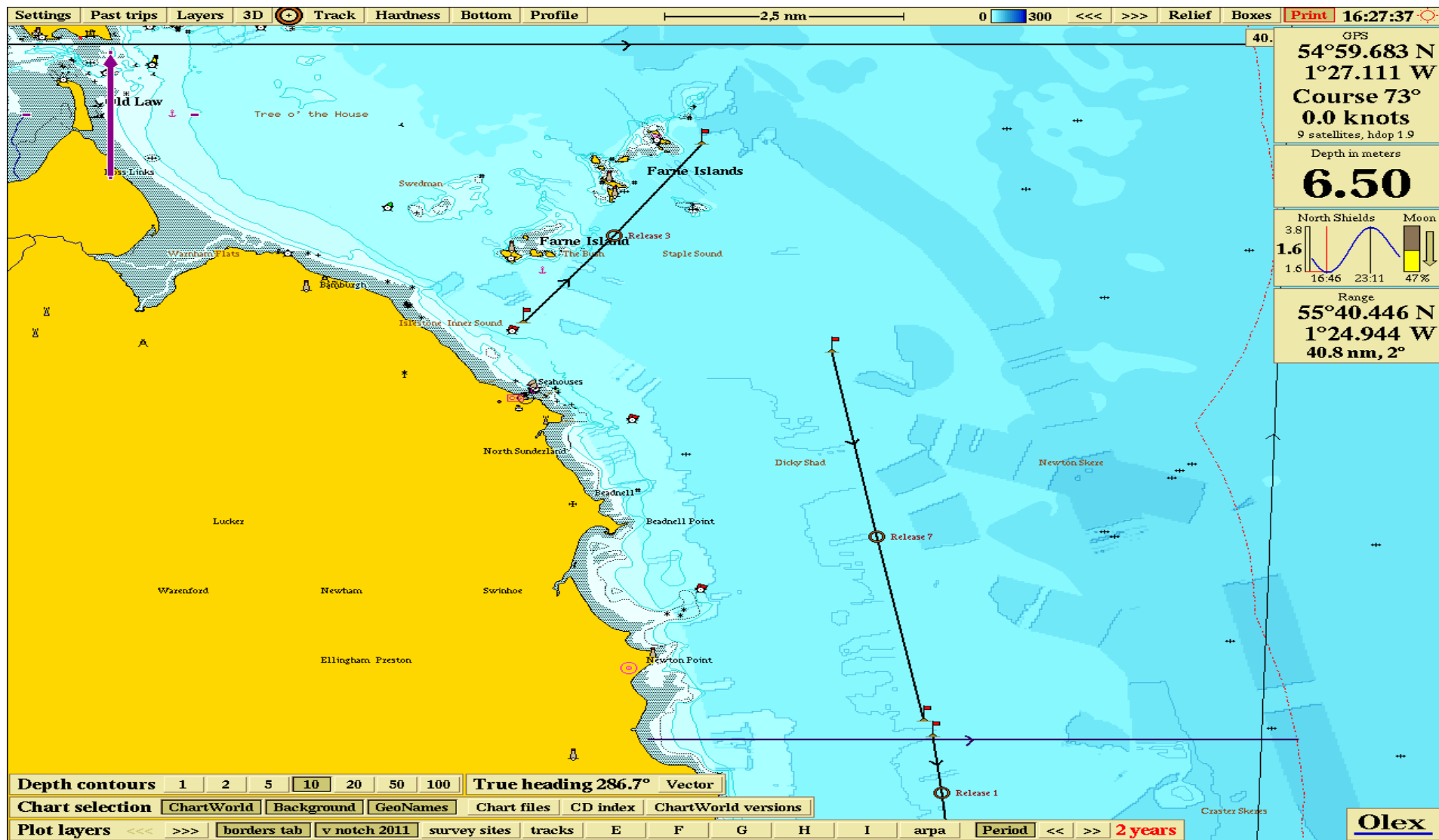
**LOBSTER 'V' NOTCH RECORDING SHEET**

<b>RELEASE NUMBER</b>	2	<b>RELEASE SECTOR</b>	3
<b>DATE</b>	01/07/2010		
<b>START RELEASE</b>	55-24.57	001-30.43	
<b>END RELEASE</b>	55-22.55	001-30.69	

Lobster Size Range (mm)	Development of Eggs		TOTAL
	Coloured green/black	Eggs eyed/hatching	
87-88	3	10	13
88-89		5	5
89-90	1	4	5
90-91	4	9	13
91-92	4	11	15
92-93	2	9	11
93-94	1	3	4
94-95	5	2	7
95-96	4	4	8
96-97	3	1	4
97-98	1	2	3
98-99	2		2
99-100	1	1	2
100-101	1	2	3
101-102	3		3
102-103	1	1	2
103-104		1	1
104-105	1		1
105-106	1		1
106-107			
107-108	1		1
108-109			
109-110			
110-111	1		1
111-112	1		1
112-113	1	2	3
113-114	1		1
114-115		1	1
115-116			
116-117			
117-118			
118-119			
119-120		1	1
120-121	4	1	5
121-122			
122-123		1	1
123-124		2	2
124-125	5	3	8
<b>TOTAL</b>	<b>52</b>	<b>76</b>	<b>128</b>

## **Sector 4**

### **Embleton to North Farnes**





**LOBSTER 'V' NOTCH RECORDING SHEET**

<b>RELEASE NUMBER</b>	<b>3</b>	<b>RELEASE SECTOR</b>	<b>4</b>
<b>DATE</b>	<b>28/07/2010</b>		
<b>START RELEASE</b>	<b>55-36.00</b>	<b>001-39.11</b>	
<b>END RELEASE</b>	<b>55-38.56</b>	<b>001-35.83</b>	

Lobster Size Range (mm)	Development of Eggs		TOTAL
	Coloured green/black	Eggs eyed/hatching	
87-88	3	2	5
88-89	2	3	5
89-90	3	5	8
90-91	3	4	7
91-92	5	4	9
92-93	8	8	16
93-94	5	2	7
94-95	4	2	6
95-96	9	1	10
96-97	1		1
97-98	3		3
98-99	2		2
99-100	5	2	7
100-101	10		10
101-102			
102-103	4	2	6
103-104	1		1
104-105	1		1
105-106	2	1	3
106-107	1		1
107-108	3	1	4
108-109			
109-110	4	1	5
110-111	2	1	3
111-112	4		4
112-113	1		1
113-114			
114-115	3		3
115-116	1	1	2
116-117	2		2
117-118	1		1
118-119		1	1
119-120	4		4
120-121	1	1	2
121-122			
122-123	2	1	3
123-124			
124-125	5	1	6
<b>TOTAL</b>	<b>105</b>	<b>44</b>	<b>149</b>

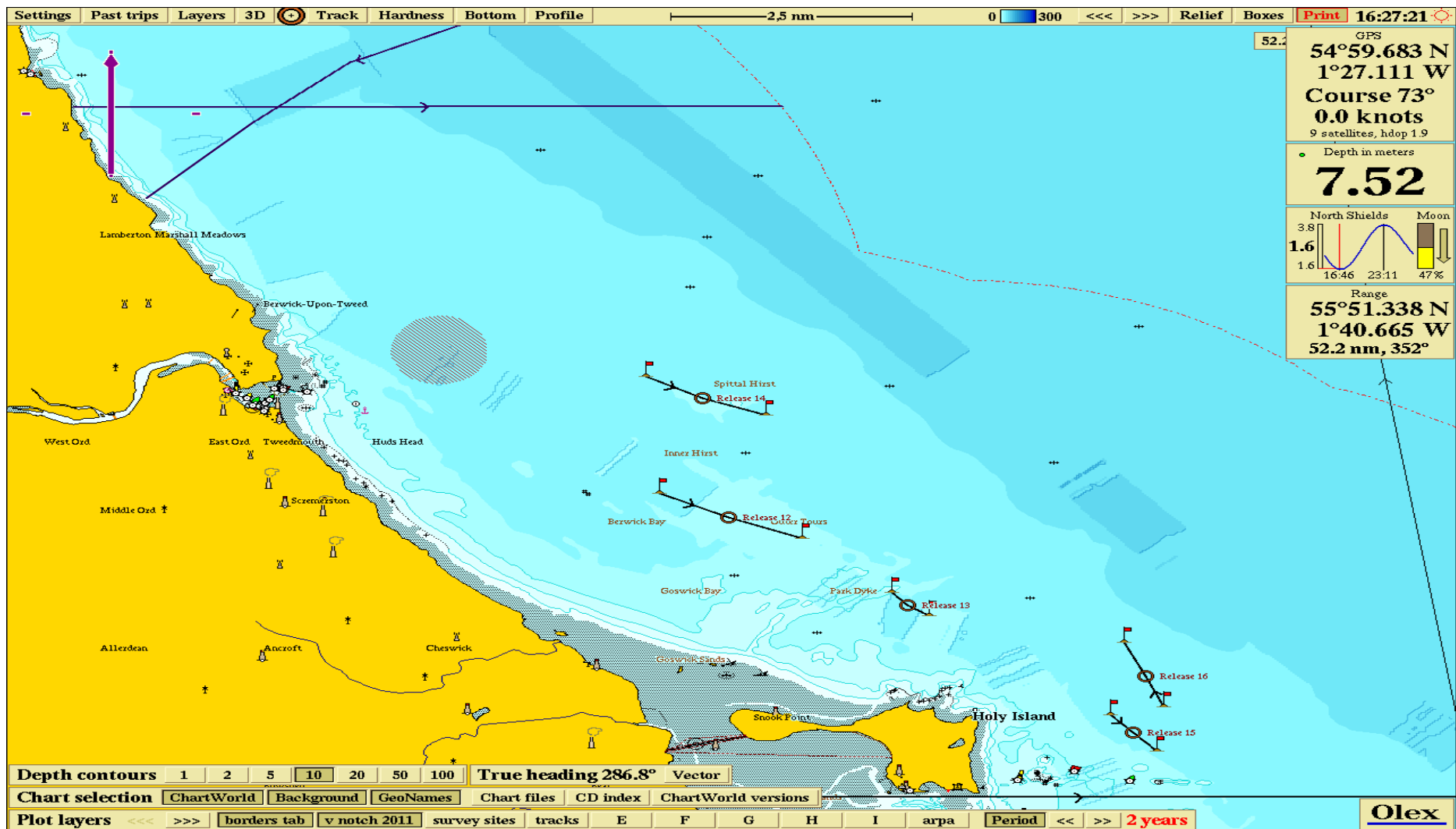
**LOBSTER 'V' NOTCH RECORDING SHEET**

<b>RELEASE NUMBER</b>	7	<b>RELEASE SECTOR</b>	4
<b>DATE</b>	06/08/2010		
<b>START RELEASE</b>	55-35.58	001-33.43	
<b>END RELEASE</b>	55-30.29	001-31.73	

Lobster Size Range (mm)	Development of Eggs		TOTAL
	Coloured green/black	Eggs eyed/hatching	
87-88	2		2
88-89	3		3
89-90	5	2	7
90-91	1		1
91-92	3		3
92-93	5	1	6
93-94	5	2	7
94-95	4	2	6
95-96	4		4
96-97	6		6
97-98	2		2
98-99	2	1	3
99-100	4	1	5
100-101	7	1	8
101-102	5	3	8
102-103	1		1
103-104	5		5
104-105	5	1	6
105-106	2		2
106-107	1		1
107-108		1	1
108-109	1	3	4
109-110	2	1	3
110-111	4	2	6
111-112	4	2	6
112-113	4		4
113-114	4	1	5
114-115	2	1	3
115-116	3		3
116-117	2		2
117-118	3	2	5
118-119	2	2	4
119-120	1	1	2
120-121	2		2
121-122			
122-123		1	1
123-124	2		2
124-125	8	2	10
<b>TOTAL</b>	<b>116</b>	<b>33</b>	<b>149</b>

## **Sector 5**

### **North Farnes to Border**



**LOBSTER 'V' NOTCH RECORDING SHEET**

<b>RELEASE NUMBER</b>	<b>12</b>	<b>RELEASE SECTOR</b>	<b>5</b>
<b>DATE</b>	<b>18/08/2010</b>		
<b>START RELEASE</b>	<b>55-44.41</b>	<b>001-52.58</b>	
<b>END RELEASE</b>	<b>55-43.76</b>	<b>001-49.95</b>	

Lobster Size Range (mm)	Development of Eggs		TOTAL
	Coloured green/black	Eggs eyed/hatching	
87-88	2		2
88-89			
89-90	3		3
90-91		2	2
91-92	3		3
92-93		1	1
93-94	3		3
94-95	5	4	9
95-96			
96-97			
97-98	2		2
98-99	5		5
99-100			
100-101	2		2
101-102	1		1
102-103	1		1
103-104	2	1	3
104-105	1		1
105-106	1	1	2
106-107			
107-108		1	1
108-109			
109-110	1		1
110-111	2		2
111-112	2		2
112-113	1		1
113-114			
114-115			
115-116			
116-117			
117-118			
118-119			
119-120			
120-121			
121-122			
122-123			
123-124			
124-125	3		3
<b>TOTAL</b>	<b>40</b>	<b>10</b>	<b>50</b>

**LOBSTER 'V' NOTCH RECORDING SHEET**

<b>RELEASE NUMBER</b>	<b>13</b>	<b>RELEASE SECTOR</b>	<b>5</b>
<b>DATE</b>	<b>18/08/2010</b>		
<b>START RELEASE</b>	<b>55-42.97</b>	<b>001-48.32</b>	
<b>END RELEASE</b>	<b>55-42.63</b>	<b>001-47.63</b>	

Lobster Size Range (mm)	Development of Eggs		TOTAL
	Coloured green/black	Eggs eyed/hatching	
87-88			
88-89	1		1
89-90	1		1
90-91	1	1	2
91-92	1	1	2
92-93	3		3
93-94	1	1	2
94-95	6		6
95-96	2		2
96-97	2		2
97-98	1		1
98-99	1		1
99-100	2		2
100-101			
101-102			
102-103	1		1
103-104			
104-105	1	1	2
105-106	1		1
106-107	2		2
107-108	2		2
108-109			
109-110	2		2
110-111	1		1
111-112			
112-113	1		1
113-114	1		1
114-115	1		1
115-116			
116-117	1		1
117-118			
118-119	3		3
119-120	1		1
120-121			
121-122			
122-123	1		1
123-124			
124-125	3		3
<b>TOTAL</b>	<b>44</b>	<b>4</b>	<b>48</b>

**LOBSTER 'V' NOTCH RECORDING SHEET**

<b>RELEASE NUMBER</b>	<b>14</b>	<b>RELEASE SECTOR</b>	<b>5</b>
<b>DATE</b>	<b>18/08/2010</b>		
<b>START RELEASE</b>	<b>55-46.11</b>	<b>001-52.82</b>	
<b>END RELEASE</b>	<b>55-45.55</b>	<b>001-50.65</b>	

Lobster Size Range (mm)	Development of Eggs		TOTAL
	Coloured green/black	Eggs eyed/hatching	
87-88	1		1
88-89	1		1
89-90	3		3
90-91	1		1
91-92	2		2
92-93	2		2
93-94		1	1
94-95	5	1	6
95-96	3		3
96-97	2		2
97-98	1		1
98-99			
99-100	1		1
100-101	1		1
101-102	1	1	2
102-103	2	1	3
103-104	2		2
104-105	3		3
105-106	2		2
106-107	1		1
107-108	2		2
108-109			
109-110	3		3
110-111	1		1
111-112	1		1
112-113			
113-114	1		1
114-115			
115-116			
116-117			
117-118	1		1
118-119			
119-120			
120-121			
121-122			
122-123	1		1
123-124			
124-125	2		2
<b>TOTAL</b>	<b>46</b>	<b>4</b>	<b>50</b>

**LOBSTER 'V' NOTCH RECORDING SHEET**

<b>RELEASE NUMBER</b>	<b>15</b>	<b>RELEASE SECTOR</b>	<b>5</b>
<b>DATE</b>	<b>18/08/2010</b>		
<b>START RELEASE</b>	<b>55-41.19</b>	<b>001-44.30</b>	
<b>END RELEASE</b>	<b>55-40.67</b>	<b>001-43.45</b>	

Lobster Size Range (mm)	Development of Eggs		TOTAL
	Coloured green/black	Eggs eyed/hatching	
87-88	4		4
88-89	3		3
89-90	1		1
90-91	1		1
91-92	3		3
92-93	2	1	3
93-94	2		2
94-95	4		4
95-96			
96-97	1		1
97-98	4		4
98-99	1		1
99-100	1		1
100-101	3		3
101-102	1	1	2
102-103			
103-104	1		1
104-105	3		3
105-106			
106-107	1	1	2
107-108	1		1
108-109			
109-110			
110-111			
111-112	2		2
112-113	1		1
113-114	1		1
114-115			
115-116	1		1
116-117			
117-118			
118-119	3		3
119-120			
120-121			
121-122			
122-123			
123-124			
124-125	2		2
<b>TOTAL</b>	<b>47</b>	<b>3</b>	<b>50</b>



**LOBSTER 'V' NOTCH RECORDING SHEET**

<b>RELEASE NUMBER</b>	<b>16</b>	<b>RELEASE SECTOR</b>	<b>5</b>
<b>DATE</b>	<b>18/08/2010</b>		
<b>START RELEASE</b>	<b>55-41.31</b>	<b>001-43.32</b>	
<b>END RELEASE</b>	<b>55-42.25</b>	<b>001-44.06</b>	

Lobster Size Range (mm)	Development of Eggs		TOTAL
	Coloured green/black	Eggs eyed/hatching	
87-88			
88-89	1		1
89-90	1		1
90-91	3		3
91-92	5		5
92-93	2		2
93-94	1		1
94-95	4		4
95-96	3		3
96-97	4		4
97-98	2	1	3
98-99	2		2
99-100	1		1
100-101	3		3
101-102		1	1
102-103			
103-104			
104-105	1		1
105-106			
106-107	1		1
107-108	2		2
108-109	1		1
109-110			
110-111			
111-112	2		2
112-113			
113-114			
114-115	1		1
115-116			
116-117	1		1
117-118			
118-119			
119-120	1		1
120-121			
121-122	1		1
122-123	1		1
123-124	1		1
124-125	3		3
<b>TOTAL</b>	<b>48</b>	<b>2</b>	<b>50</b>

**LOBSTER 'V' NOTCH RECORDING SHEET**

**TOTAL 2010**

Lobster Size Range (mm)	Development of Eggs		TOTAL
	Coloured green/black	Eggs eyed/hatching	
87-88	35	32	67
88-89	20	16	36
89-90	39	23	62
90-91	41	34	75
91-92	53	27	80
92-93	56	32	88
93-94	40	19	59
94-95	62	22	84
95-96	42	13	55
96-97	28	4	32
97-98	31	8	39
98-99	20	2	22
99-100	19	12	31
100-101	47	8	55
101-102	23	10	33
102-103	25	6	31
103-104	20	3	23
104-105	24	3	27
105-106	19	5	24
106-107	14	3	17
107-108	18	6	24
108-109	7	4	11
109-110	20	4	24
110-111	28	7	35
111-112	24	5	29
112-113	13	3	16
113-114	13	3	16
114-115	9	3	12
115-116	9	3	12
116-117	11	2	13
117-118	5	2	7
118-119	10	3	13
119-120	10	3	13
120-121	11	4	15
121-122	1	3	4
122-123	6	3	9
123-124	3	3	6
124-125	38	9	47
<b>TOTAL</b>	<b>894</b>	<b>352</b>	<b>1246</b>