

# Fisheries in EMS Habitats Regulations Assessment for **Amber** and **Green** risk categories

## NWIFCA-RA-SPA-NORTH PENFOLD COCKLE 2018

Date completed: 27-06-18

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### Site: **Ribble and Alt Estuaries**

European Designated Sites: UK9005103 Ribble and Alt Estuaries Special Protection Area (SPA)  
UK11057 Ribble and Alt Estuaries Ramsar  
UK0013076 Sefton Coast SAC  
UK3020294 Liverpool Bay SPA adjoins this site, for fullness of assessment bird features have been included in this document.  
Ribble Estuary rMCZ

European Marine Site **Ribble and Alt Estuaries**

### Qualifying Feature(s):

#### **SPA and Ramsar**

A037 *Cygnus columbianus bewickii*; Bewick's swan (Non-breeding)  
A038 *Cygnus cygnus*; Whooper swan (Non-breeding)  
A040 *Anser brachyrhynchus*; Pink-footed goose (Non-breeding)  
A048 *Tadorna tadorna*; Common shelduck (Non-breeding)  
A050 *Anas penelope*; Eurasian wigeon (Non-breeding)  
A052 *Anas crecca*; Eurasian teal (Non-breeding)  
A054 *Anas acuta*; Northern pintail (Non-breeding)  
A130 *Haematopus ostralegus*; Eurasian oystercatcher (Non-breeding)  
A137 *Charadrius hiaticula*; Ringed plover (Non-breeding)  
A140 *Pluvialis apricaria*; European golden plover (Non-breeding)  
A141 *Pluvialis squatarola*; Grey plover (Non-breeding)  
A143 *Calidris canutus*; Red knot (Non-breeding)  
A144 *Calidris alba*; Sanderling (Non-breeding)  
A149 *Calidris alpina alpina*; Dunlin (Non-breeding)  
A151 *Philomachus pugnax*; Ruff (Breeding)  
A156 *Limosa limosa islandica*; Black-tailed godwit (Non-breeding)  
A157 *Limosa lapponica*; Bar-tailed godwit (Non-breeding)  
A162 *Tringa totanus*; Common redshank (Non-breeding)  
A183 *Larus fuscus*; Lesser black-backed gull (Breeding)  
A193 *Sterna hirundo*; Common tern (Breeding)

Waterbird assemblage

Seabird assemblage

Breeding Waterbird Assemblage

Natterjack toad (NON MARINE)

#### **SAC**

H2110. Embryonic shifting dunes  
H2120. Shifting dunes along the shoreline with *Ammophila arenaria* ("white dunes"); Shifting dunes with marram  
H2130. Fixed dunes with herbaceous vegetation ("grey dunes"); Dune grassland\*  
H2150. Atlantic decalcified fixed dunes (*Calluno-Ulicetea*); Coastal dune heathland\*  
H2170. Dunes with *Salix repens* ssp. *argentea* (*Salicion arenariae*); Dunes with creeping willow  
H2190. Humid dune slacks  
S1166. *Triturus cristatus*; Great crested newt  
S1395. *Petalophyllum ralfsii*; Petalwort

**Site sub-feature(s):****SPA and Ramsar****Supporting Habitat:**

- intertidal rock
- intertidal sand and muddy sand
- intertidal mud
- intertidal mixed sediment
- coastal saltmarshes and saline reedbeds – (Saltmarsh)
- freshwater and coastal grazing marsh (Saltmarsh)
- coastal sand dunes (Sand dunes)
- water column

***Great crested newt and Natterjack toad Supporting Habitat:*** Coastal sand dunes

**Generic sub-feature(s):**

Estuarine birds, Surface feeding birds, Benthic feeding seabirds, Intertidal mud and sand, Saltmarsh spp.

**High Level Conservation Objectives:**

With regard to the SPA and the individual species and/or assemblage of species for which the site has been classified and the Ramsar Site and the wetland habitats and/or species for which the site has been listed (the 'Qualifying Features' listed above), and subject to natural change;

Ensure that the integrity of the site is maintained or restored as appropriate, and ensure that the site contributes to achieving the aims of the Wild Birds Directive and ensure that the site contributes to achieving the wise use of wetlands across the UK, by maintaining or restoring:

- ☐ The extent and distribution of the habitats of the qualifying features
- ☐ The structure and function of the habitats of the qualifying features
- ☐ The supporting processes on which the habitats of the qualifying features rely
- ☐ The population of each of the qualifying features, and,
- ☐ The distribution of the qualifying features within the site.

**Sefton Coast SAC**

With regard to the SAC and the natural habitats and/or species for which the site has been designated (the 'Qualifying Features' listed below), and subject to natural change;

Ensure that the integrity of the site is maintained or restored as appropriate, and ensure that the site contributes to achieving the Favourable Conservation Status of its Qualifying Features, by maintaining or restoring;

- ☐ The extent and distribution of qualifying natural habitats and habitats of qualifying species
- ☐ The structure and function (including typical species) of qualifying natural habitats
- ☐ The structure and function of the habitats of qualifying species
- ☐ The supporting processes on which qualifying natural habitats and the habitats of qualifying species rely
- ☐ The populations of qualifying species, and,
- ☐ The distribution of qualifying species within the site.

**Ribble Estuary rMCZ**

The Ribble Estuary recommended Marine Conservation Zone (MCZ) is an inshore site that covers an area of approximately 15 km<sup>2</sup>. It is located on the north-west coast of England, near Preston. The site boundary has been modified from that proposed by the Regional MCZ Project in order to better capture potential smelt (*Osmerus eperlanus*) spawning habitat. It now extends up to the tidal limit on the Ribble near Samlesbury, on the River Douglas near Rufford and on the River Yarrow near Croston.

## Fishing activities assessed:

**Gear type(s):**

Hand-gathering – Cockle (*Cerastoderma edule*)

# **1. Introduction**

## **1.1 Need for an HRA assessment**

### **THE CONSERVATION OF HABITATS AND SPECIES REGULATIONS 2010 (AS AMENDED)**

The NWIFCA proposes to authorise an undersize cockle hand-gathered fishery in the cockle close season at the cockle bed known as North Penfold on the South side of the Ribble Estuary derogating against the minimum landing size and the close season as in NWIFCA byelaw 3, permit to fish for cockles and mussels. This proposal is classed as a plan or project and the area lies within a European designated site (also commonly referred to as Natura 2000 sites), and therefore has the potential to affect the designated features. European sites are afforded protection under the Conservation of Habitats and Species Regulations 2017, as amended (the 'Habitats Regulations'). The proposal is within the Ribble and Alt estuaries Special Protection Area (SPA) and the Ribble and Alt Estuaries Ramsar and is in close proximity to the Sefton Coast Special Conservation Area (SAC) and the Liverpool Bay Special Protection Area (SPA).

As a competent authority under the provisions of the Habitats Regulations, the NWIFCA should have regard for any potential impacts that a plan or project may have. Under the provisions of the Habitats Regulations, NWIFCA has undertaken an Appropriate Assessment of the proposal, in accordance with Regulation 6.1. Natural England is a statutory consultee on the Appropriate Assessment stage of the Habitats Regulations Assessment process, and their advice is incorporated into this document.

## **1.2 Proposal**

The NWIFCA proposes to authorise a spatially restricted undersize cockle hand-gathered fishery in the cockle closed season at the cockle bed known as North Penfold on the south side of the Ribble Estuary on 30<sup>th</sup> July until 31<sup>st</sup> August 2018, under written authorisation against NWIFCA Byelaw 3 paragraph 6, minimum landing size and paragraph 12, fisheries closure.

The purpose of this site specific assessment document is to assess whether or not in the view of NWIFCA the fishing activity of a hand-gathering undersize cockle fishery at the North Penfold cockle bed located on the south side of the Ribble Estuary has a likely significant effect on the qualifying features of the Ribble and Alt Estuary European Site, and on the basis of this assessment whether or not it can be concluded that hand-gathering undersize cockle fishery in the closed season will not have an adverse effect on the integrity of this European Site.

## **2. Information about the EMS**

(See cover pages).

## **3. Interest feature(s) of the EMS categorised as ‘Red’ risk and overview of management measure(s) (if applicable)**

No interest features of the EMS categorised as ‘Red’ risk.

## **4. Information about the fishing activities within the site**

### **4.1 Cockle Hand-gathering**

Hand-gathering of cockles has been a long-standing traditional fishery within the North West. Methods have changed very little over the years, with a jumbo used to fluidise the soft sediments in which the buried cockles are found resulting in them rising to the sediment surface or when in softer sediment or at high densities raked directly from the top layer of the sediment.

Fishermen access the beds by ATVs and tractors due to the high risk of getting stuck in soft sediment. Depending on the area to be fished, the time when the bed is uncovered and safe to get on to and return from may be severely restricted.

The cockle fishery is highly variable in its production and consequently, its prosecution. Records show variability in stock levels and associated fishing activity as a long-standing feature of the fishery.

### **4.2 Regulation of Hand-gathering**

NWIFCA regulates fisheries in its District through a suite of byelaws. Regulations relating specifically to the Ribble Estuary are listed below with the full text of the regulations in Annex 6.

NWIFCA Byelaw 3	Permit to fish for cockles and mussels
NWSFC Byelaw 13a	Cockles and mussels – management of the fishery
NWSFC Byelaw 16	Shellfishery – temporary closure

NWIFCA Byelaw 3 Permit to Fish for Cockles and Mussels (Annex 6) was introduced in 2012 and succeeded in creating vastly improved management of the fishery. The regulation has created a more professional and responsible group of fishers. Under these regulations, the number of permit holders has been reduced significantly. There are currently 111 permits issued for the whole NWIFCA District with a possible 10 renewals yet to renew giving a total maximum of 121 permits (correct 04/06/18).

Without a permit within the NWIFCA district it is still permissible when cockle beds are open for 5kg per person per day of size cockle to be collected for human consumption provided it is outside of the commercial area as stated in NWIFCA Byelaw 3.

### **4.3 Multi Agency Liaison Group**

With limited staff resources available to NWIFCA, effective control of fishing effort is organised with the assistance of other organisations. Consequently, in administering the fishery, the Authority works closely with other organisations such as the police, local councils, the Maritime and Coastguard Agency (MCA), the

Health & Safety Executive (HSE), the Department for Work and Pensions (DWP), Natural England (NE), the Gangmaster and Labour Abuse Authority (GLAA) and the Environment Agency (EA). This joint working is facilitated at a strategic level through a multi-agency liaison group. The completion of a Multi-Agency Operational Plan will have undoubted benefit to the management of the fishery.

#### **4.4 Biosecurity**

The Ribble Estuary is currently shellfish disease free and the Authority considers it a priority to maintain this status. In order to implement effective measures to prevent the introduction and / or spread of diseases or non-natives the Authority has developed and published a Biosecurity Plan, detailing controls and conditions that will be applied to all commercial shellfish activities. The Biosecurity Plan seeks to ensure that consignments and/or the areas from which they come, are regularly and thoroughly checked for invasive non-native invasive species (INNS). The NWIFCA will monitor this fishery for any INNS.

#### **4.5 Current Status of Stock**

The North Penfold cockle bed received a spat settlement in 2015 at a very high density; this often occurs but typically the cockles die or wash out over the winter before they have had time to grow. This cockle survived the winter of 2015 and received another large settlement of cockle in 2016. The area of cockle is protected / restricted by a large sandbank that runs around the seaward extremity of the cockle bed, and this has created a very muddy hollow where the cockles settled which is thought to have protected the cockle over the winters but has also restricted the cockle movement, and due to the exposure of the bed and the high concentration the growth of the cockle. NWIFCA has monitored and surveyed the cockle bed since 2015 and once the cockle reached 15mm it has only grown 2-4mm each year. Due to the concentration of cockle, exposure of the bed combined with the hot weather and the fact that the cockle is likely to have just spawned there has been evidence of cockle mortality in May and June 2018. Cockle in the Northwest typically lives 3 to 4 years before it naturally dies. In view of the fact it is slow growing and the potential for the cockle to suffer high mortality rates over the summer of 2018 it has been decided to open an undersized cockle fishery during the closed season in the area where the cockle is at the highest density. Below are details of the last cockle survey on North Penfold. Further inspections have been made during May and June to ascertain possible changes, of which there has been minimal since March.

##### **North Penfold Cockle Survey 20-03-18**

Means were calculated from all stations with zero counts on the edge of the bed removed. Less than 5mm cockle was not used in the undersize figures due to the high variable survivability of cockle at this small size. Maps were created showing the overall survey area, density of size cockle, density of undersize cockle (excluding cockles in the 0-5mm size range), and the frequency of size classes (pie charts show the frequency of different size classes and the size of the pie chart indicates the total density of cockles present).

Some areas of the bed have hardened considerably since the last survey in November with the majority of the bed, minus the red area on the maps below, being more accessible by foot. Quad access remains difficult as some areas are still too soft. The bed appears to have spread out, mainly heading east / north east. This has meant that some areas of cockles have grown and reached size while other areas have shown little change in the size of the cockle and remain small (19-21mm in shell length).

In the mapping the areas have been defined as:

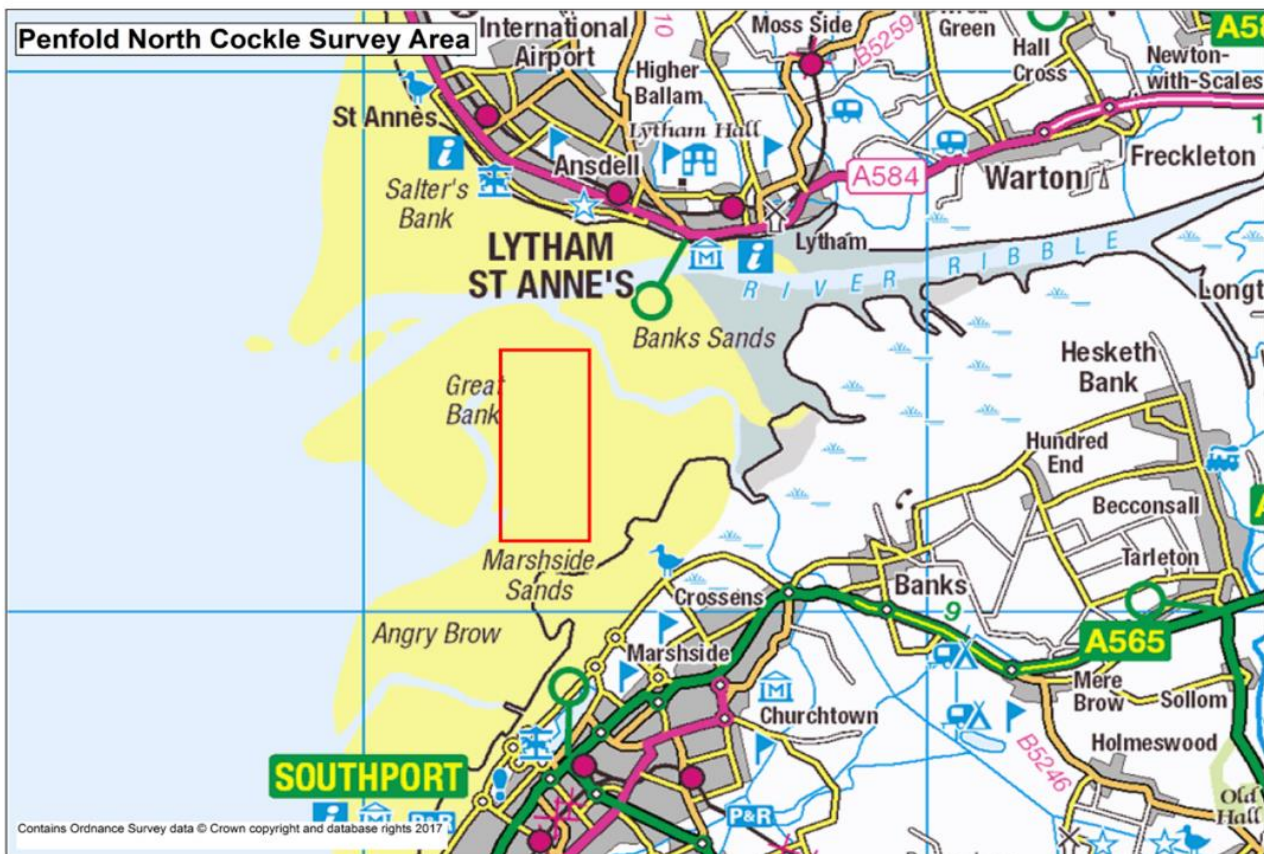
- the total bed area taken from the survey points (Black);
- an area which is dominated by small cockle (19-21mm) (Blue);
- an area which is more mixed (outer boundary has been mapped from judgment and sediment type whilst officers were on the bed due to the soft nature of the sediment and difficulty covering it) (Red);
- an area which has a greater percentage of size cockle (Yellow).

It should be noted that there has been a small settlement of 2017 cockle in some of the locations which can be seen on the size frequency map. There is evidence (numerous wader footprints over most of the bed and broken shells) that there has been a lot of bird feeding occurring on the area (images below) which has not been witnessed in the most recent surveys and presumably is due to the hardening of the mud.

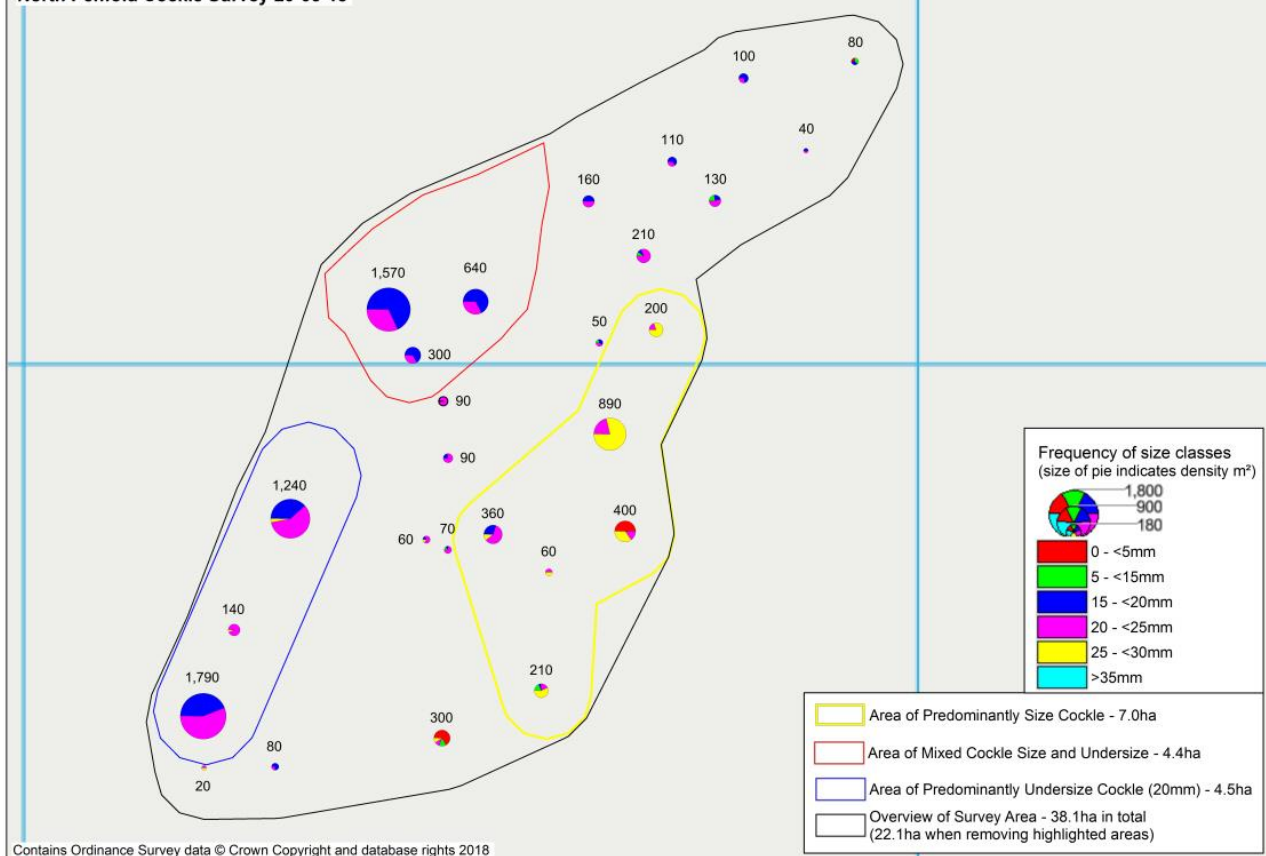
Mean number of size cockle: 123 per m<sup>2</sup> (min. 0, max 700)

Mean number of undersize cockle: 209 per m<sup>2</sup> (min 0, max 1790)

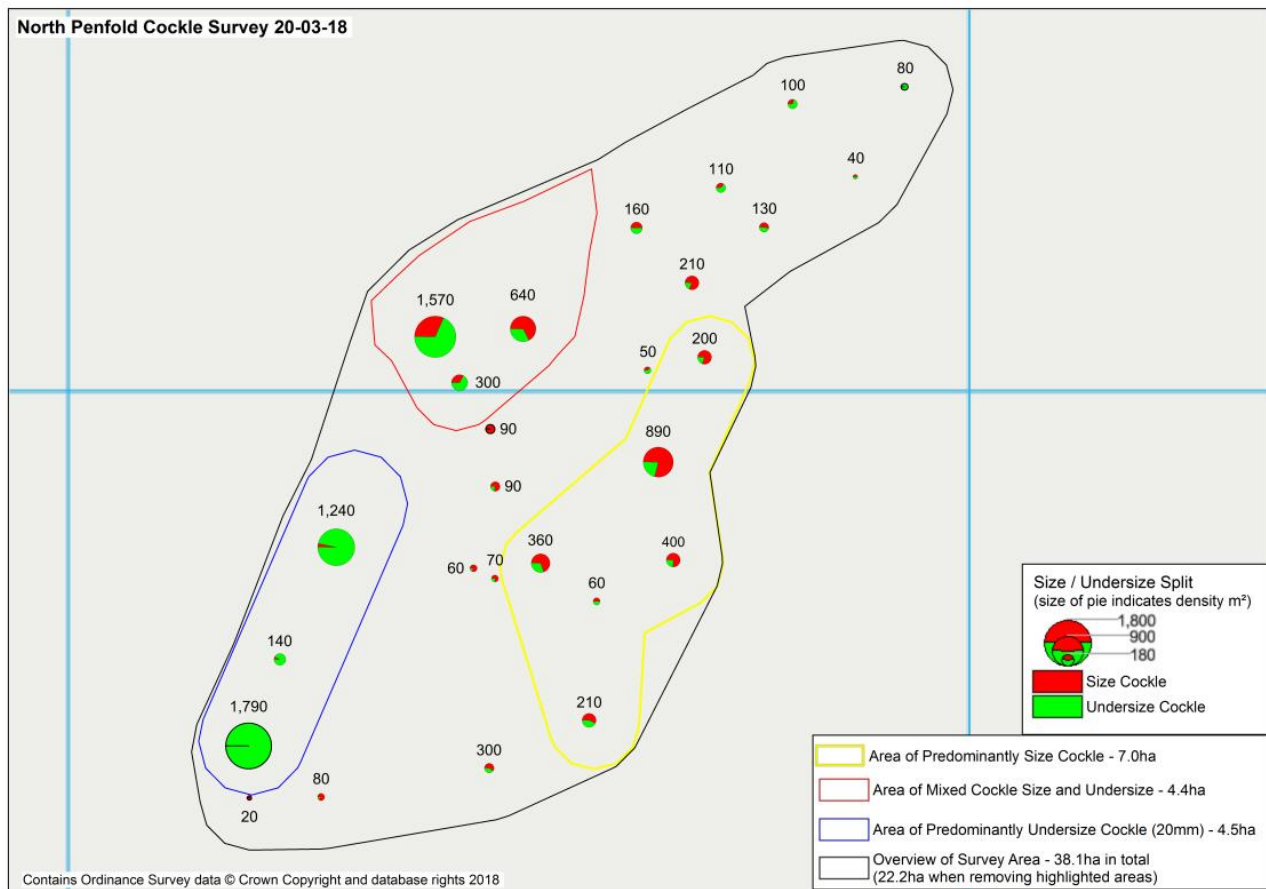
No estimates of biomass have been calculated.



# North Penfold Cockle Survey 20-03-18

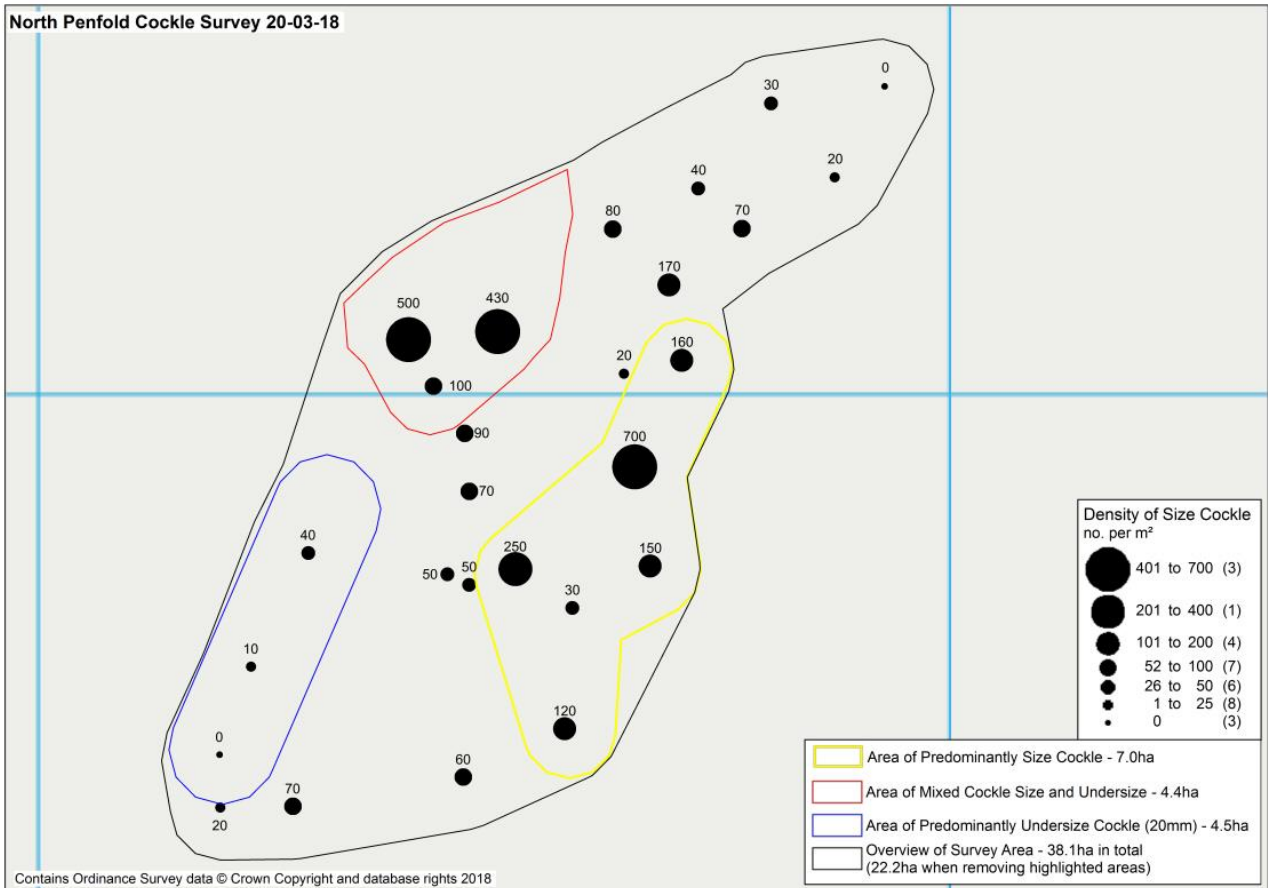


# North Penfold Cockle Survey 20-03-18

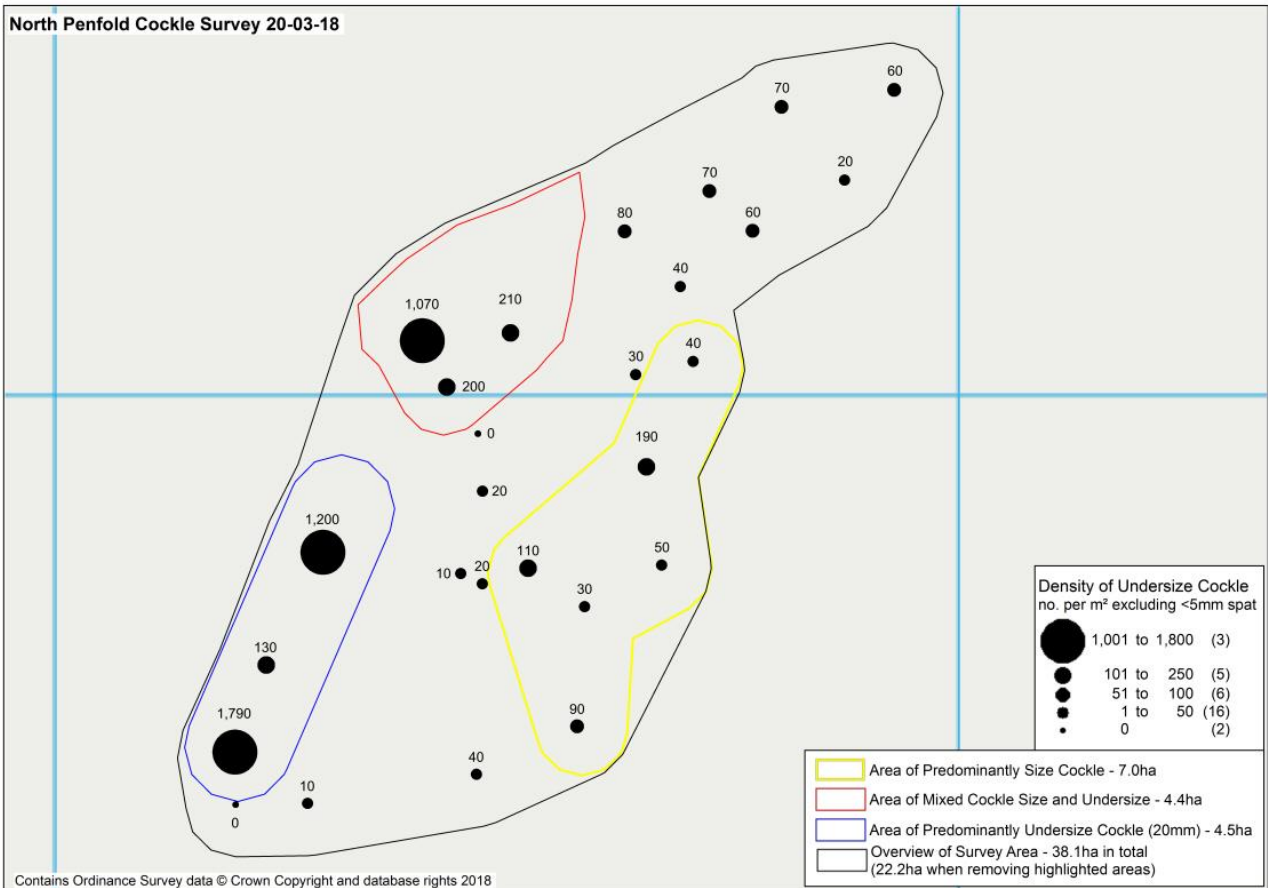




# North Penfold Cockle Survey 20-03-18



# North Penfold Cockle Survey 20-03-18



## 4.6 Information on Fishing Activity

The proposed fishery will be permitted under written authorisation against NWIFCA Byelaw 3 paragraph 6 and 12, minimum landing size and cockle closes season to all NWIFCA Byelaw 3 permit holders between 30<sup>th</sup> July and 31<sup>st</sup> August 2018 on specified tides. The timing of the fishery has been decided based on information provided by the RSPB and Natural England to avoid the period when birds are nesting on the saltmarsh where the fishery will be accessed. Currently there are 111 permit holders with a maximum of 121 permit holders. From figures of attendance to other cockle and mussel fisheries regulated within the NWIFCA district and from information provided via contact with interested permit holders, it is expected that a maximum of 40 Byelaw 3 permit holders will prosecute the fishery on any given open tide. It is expected once the fishery has opened and the initial volume of cockle has been removed the number of gatherers will reduce significantly and the fishery will cease. The full authorisation can be found in Annex 4, a summary of the restrictions are provided below:-

- It is only valid for the period from the issue date **30/07/18** to the expiry date **31/08/18**.
- The authorisation is only valid for current Byelaw 3 permit holders. It does not allow any other person to take or remove cockle.
- Fishing shall only take place within the areas specified.
- Fishing shall only take place on the days and tides specified.
- The cockles shall only be gathered by hand or with a rake.
- Access to the fishery shall be by tractor or ATV only. Access by boat is not authorised.
- Access to the fishery must be via the Haul Road track at Marshside. All other access routes from the Fylde and Sefton coast will be closed to cockle fishers.
- All vehicles must be parked on Haul Road and all cockles must be tonned up on the Haul Road.

## 5. Test for Likely Significant Effect (LSE)

The Habitats Regulations Assessment (HRA) is a step-wise process and is first subject to a coarse test of whether a plan or project will cause a likely significant effect on an EMS<sup>1</sup>.

**Is the activity/activities directly connected with or necessary to the management of the site for nature conservation?** NO

### 5.1 Table 1: Assessment of LSE

**Features:** All qualifying features and sub-features have been screened out other than those in the table below, due to there being no interaction between the fishing activity and the qualifying features / sub-features. All Sefton Coast SAC feature have been screened out as no fishing or travel to and from the fishery will occur on or close to the boundary of the SAC. The Ribble Estuary rMCZ feature smelt (*Osmerus eperlanus*) has been screened out due the Authorisation area being outside of the rMCZ boundary, the fishery being intertidal and prohibition of boat access to the fishery.

**Pressures:** All pressures from the Advice on Operations table provided in the Ribble and Alt Estuary Conservation Advice package have been screened out, other than the pressures in the following table due to the nature of the fishing activity.

Qualifying Feature	Sub-feature	Potential pressure(s)	Sensitivity	Potential for Likely Significant Effect?	Justification and evidence
SPA Habitats	Supporting Intertidal mud	Abrasion/disturbance of the substrate on the surface of the seabed	Sensitive	No	The fishing activity does not occur on the feature and access is via an established route.
		Penetration and/or disturbance of the substrate below the surface of the seabed, including abrasion	Sensitive	No	
	Intertidal sand and muddy sand	Abrasion/disturbance of the substrate on the surface of the seabed	Sensitive	No	Hand-gathering with a rake is unlikely to have any impact in such a highly dynamic site.
		Penetration and/or disturbance of the substrate below the surface of the seabed, including abrasion	Sensitive	No	Hand-gathering with a rake is unlikely to have any impact in such a highly dynamic site.
		Genetic modification & translocation of indigenous species	Insufficient Evidence to assess	No	Cockles will be removed straight into bags and transported to a boiling plant. Low level of diversity on sands and highly selective fishery will preclude translocation of other species.
		Litter	Sensitive	Yes	Feature and pressure taken through to AA.
		Physical change (to another seabed type)	Sensitive	No	Hand-gathering with a rake unlikely to have any impact in such a highly dynamic site.
		Removal of non-target species	Sensitive	No	Highly selective fishery - no by-catch of non-target species.
		Removal of target species	Sensitive	Yes	Feature and pressure taken through to AA.

<sup>1</sup> Managing Natura 2000 sites: [http://ec.europa.eu/environment/nature/natura2000/management/guidance\\_en.htm](http://ec.europa.eu/environment/nature/natura2000/management/guidance_en.htm)

	<p><i>Salicornia</i> and other annuals colonising mud and sand; Glasswort and other annuals colonising mud and sand; Pioneer saltmarsh</p> <p>Atlantic salt meadows (<i>Glaucopuccinellia maritima</i>) (referred to as Saltmarsh)</p>	<p>Abrasion/disturbance of the substrate on the surface of the seabed</p> <p>Penetration and/or disturbance of the substrate below the surface of the seabed, including abrasion</p> <p>Genetic modification &amp; translocation of indigenous species</p> <p>Litter</p> <p>Physical change (to another seabed type)</p>	<p>Sensitive</p> <p>Sensitive</p> <p>Sensitive</p> <p>Sensitive</p> <p>Sensitive</p>	<p>No</p> <p>No</p> <p>No</p> <p>Yes</p> <p>No</p>	<p>The access is restricted to one access route, Haul road which is an established access route with hard standing causing no physical damage to the feature.</p> <p>The access is restricted to one access route, Haul road which is an established access route with hard standing causing no physical damage to the feature.</p> <p>Highly selective fishery will preclude translocation of other species.</p> <p>Feature and pressure taken through to AA.</p> <p>Hand-gathering with a rake unlikely to have any impact in such a highly dynamic site.</p>
<p><i>Cygnus columbianus bewickii</i>; Bewick's swan (overwintering)</p> <p><i>Cygnus</i> Whooper swan (overwintering)</p> <p><i>Anser brachyrhynchus</i>; Pink-footed goose (overwintering)</p> <p><i>Tadorna tadorna</i>; Common shelduck (overwintering)</p> <p><i>Anas penelope</i>; Wigeon (overwintering)</p> <p><i>Anas crecca</i>; Eurasian teal (overwintering)</p> <p><i>Anas acuta</i>; Northern pintail (overwintering)</p> <p><i>Haematopus ostralegus</i>; Eurasian oystercatcher (overwintering)</p> <p><i>Charadrius hiaticula</i>; Ringed plover</p> <p><i>Pluvialis apricaria</i>; European golden plover (overwintering)</p> <p><i>Pluvialis squatarola</i>; Grey plover (overwintering)</p> <p><i>Calidris canutus</i>; Red knot (overwintering)</p> <p><i>Calidris alba</i>; Sanderling (overwintering)</p> <p><i>Calidris alpina alpina</i>; Dunlin (overwintering)</p> <p><i>Calidris pugnax</i>; Ruff (breeding)</p> <p><i>Tringa totanus</i>; Common redshank</p> <p><i>Limosa limosa</i>; Black-tailed godwit (overwintering)</p> <p><i>Limosa lapponica</i>; Bar-tailed godwit (overwintering)</p> <p><i>Larus fuscus</i>; Lesser black-backed gull (Breeding)</p>	Supporting Habitats assessed above	<p>Removal of target species (cockles)</p> <p>Removal of non-target species</p> <p>Visual disturbance</p>	<p>Some species sensitive, others screened out</p> <p>Sensitive</p> <p>Sensitive</p>	<p>Yes</p> <p>No</p> <p>Yes</p>	<p>Species sensitive to removal of cockles:</p> <ul style="list-style-type: none"> <li>- Oystercatcher</li> <li>- Knot</li> <li>- Scaup</li> <li>- Common Scoter</li> </ul> <p>Highly selective fishery. No by-catch or discards of non-target species.</p> <p>All species taken through to AA</p>

<i>Sterna</i> Common (Breeding)					
<i>hirundo</i> tern					
Liverpool Bay SPA features that have not been assessed elsewhere:- Red throated diver Great cormorant Red breasted merganser Little gull, Little tern					
Waterbird assemblage (inc. <i>whimbrel</i> , <i>curlew</i> , <i>cormorant</i> , <i>scaup</i> , <i>common scoter</i> , - not assessed in their own right)					
Seabird assemblage (inc. <i>black-headed gull</i> , -not assessed in their own right)					

Is the potential scale or magnitude of any effect likely to be significant? <sup>2</sup>	Alone	OR In-combination <sup>3</sup>
	Yes	Yes
	Comments	Comments
Have NE been consulted on this LSE test? If yes, what was NE's advice?	Yes, see below.	

<sup>2</sup> Yes or uncertain: completion of AA required. If no: LSE required only.

<sup>3</sup> If conclusion of LSE alone an in-combination assessment is not required.

## 6. Appropriate Assessment

### Potential risks to features

#### 6.1 Potential risks to SPA supporting habitat features

- Intertidal sand and muddy sand
- Saltmarsh

##### 6.1.1 Pressures and Potential Impacts

###### i. Litter – Intertidal sand and muddy sand and saltmarsh

Past fisheries have had a poor reputation for large amounts of litter being deposited on the parking and access areas, and being left on the cockle beds. Items have included food and drink receptacles, cockle net bags and sacks. Potential impacts could include entanglement of fish and birds in the bags and sacks, and swallowing / entanglement of birds and mammals (both marine and terrestrial) of other litter.

###### ii. Removal of target species - Intertidal sand and muddy sand

Potential to effect the presence and spatial distribution of feature communities, the presence and abundance of typical species and the species composition of component communities.

##### 6.1.2 Exposure

###### i. Litter

Between 2016 – 2018 cockle fisheries have occurred on Leven Island, Flookburgh, Pilling Sands and Leasowe cockle beds and in most years there has been a fishery on Heysham Flat for seed mussel as well as ongoing size mussel fisheries around NWIFCA district. In this time there have been a few of reports of litter being an issue at these fisheries, which when highlighted to Byelaw 3 hand-gathers and buyers at the fishery have been sorted and the litter has been cleaned up. There is a Code of Conduct (Annex 7) which sets out good practices for Intertidal shellfish fisheries, which includes not leaving litter. When NWIFCA officers are inspecting the fisheries, they will be able to monitor levels of littering.

The NWIFCA is confident that littering will be controlled with monitoring in place to identify quickly if litter is a problem. Therefore litter will have no risk of adverse effect on the integrity or conservation status of the designated features within the site.

###### ii. Removal of target species - Intertidal sand and muddy sand, mixed and coarse sediments only

The fishery is only being authorised due to the high likelihood that the cockle in its current state will suffer from high mortality rates in the coming months. From surveys and inspections carried out by NWIFCA the cockle at North Penfold settled in 2015 in a small area but at a high density which was followed by another settlement in 2016. Typically the cockle in this area does not persist as it is prone to being washed out during the winter as seen in previous years. It is thought that due to the sand bank which runs the seaward side of the bed it has offered the cockle some protection over the winter but has

also confined the cockle to the area not allowing it to spread out. When assessing the following information on the cockle present at North Penfold, NWIFCA considers the removal of target species (cockle) from the intertidal sand and muddy sand to have no risk of adverse effect on the integrity or conservation status of the site as:

- The majority of the cockle is three years old and typically the lifespan of cockle in the North West is 3-4years.
- The cockle has already spawned in 2018 if it was in the condition to spawn.
- The cockle is very dense in a small muddy area and restricted from spreading out.
- The cockle is very slow growing (only growing a few millimetres each year after first year's growth) and unlikely to reach size.
- The position of the bed is high up the beach leaving it exposed to the warmer summer temperatures.
- The inspection on 29<sup>th</sup> April and 25<sup>th</sup> May provided evidence that some the cockle has already died.
- There is a high likelihood that the majority of the cockle will continue to die.
- The fishing of the dense area of cockle will thin the cockle out by reducing the areas where the cockle is at the highest concentration. Once the main dense areas of cockle have been reduced in density the fishing is likely to stop as it will not be commercially viable to keep fishing the stock. This will leave cockle across the bed at a reduced density giving the remaining cockle the best chance of surviving.

## **6.2 SPA and Ramsar Features**

- SPA and Ramsar birds

### **6.2.1 Potential Impacts**

#### **i) Removal of target species (cockles) for oystercatcher, knot, scaup and common scoter**

Cockles form part of an important prey resource for oystercatchers, knot, scaup and common scoter. If bird populations are to be maintained in healthy condition, sufficient shellfish to meet their demands must remain for them.

If fishing removes essential prey and there is a lack of food, the impacts on these species will vary at different times of year. For example, prey resource requirements will be far greater during autumn and at the beginning of winter than at other times of the year, as enough resource needs to be present for all the birds to feed through the cold months, when energy requirements are higher. Over-wintering waders require to put on weight and get into best condition prior to migrations north for the summer, or they will not survive long flight distances and suffer high mortalities.

Oystercatchers mainly eat larger-sized cockles, which are the target of the cockle fisheries. Although the birds can eat alternative prey species such as earthworms when shellfish are scarce, these prey often do not enable birds to survive as well, and in such good body condition, as when shellfish are abundant (Atkinson et al 2003; Goss-Custard et al 2004).

Knot eat smaller bivalves with lower and upper size limits of around 5 and 12.5mm shell length respectively (Bell et al 2001).

Scaup and common scoter mainly eat larger-sized bivalves and are known to feed on a variety of bivalve species including cockle. Scaup and common scoter dive below the water in search of prey items.

- ii) Visual disturbance - All SPA species within vicinity of fishery, on the saltmarsh access route and over the sandbanks.

Visual disturbance could impact on condition of any of the listed bird species, by causing unnecessary energy expenditure if flushed and taking to flight. For birds feeding on the affected areas it could also reduce feeding times, and increase competition if birds are forced to concentrate into reduced feeding areas. From mid-March onwards some species, such as Redshank, establish breeding territories on the saltmarsh and will be actively displaying. Disturbance caused by access to the fishery across the saltmarsh during nesting and breeding times may reduce breeding success of this nationally declining species.

### 6.2.2 Exposure

- i) Removal of target species (cockles) for oystercatcher, knot, scaup, common scoter;

The fishery is only being authorised due to the prediction that the bed is likely to see high mortality rates over the summer (as stated in 6.1.2 (ii)). There are alternative feeding sources of bivalves in the Ribble Estuary these are:

- Mussel of varying sizes (5-55mm) on the Ribble training walls.
- A small area of cockle on the North side of the Ribble Estuary at the North Run cockle bed high up the beach.
- Areas of low cockle densities on the South side of the Ribble Estuary on the surrounding beds.

Due to the practice of fishing (raking by hand), nature of the bed being very muddy, the condition of the cockle, the majority of it being 19-20mm, once the dense areas of cockle have been fished it will thin the density of cockle out across the bed which will potentially have the benefit of increasing the survivability of the remaining cockle.

NWIFCA does not consider the removal of target species (cockle) to negatively impact the amount of food source available for the birds as the cockle is likely to suffer high mortality rates and therefore considers the removal of target species (cockle) will have no risk of adverse effect on the integrity or conservation status of the site.

- ii) Visual disturbance - All SPA species within vicinity of fishery, on the saltmarsh access route and over the sandbanks

The fishery will be accessed by quadbike with all operations (parking and tonning up) occurring on Haul Road. Haul Road is a hard-core track located on the south side of the Ribble Estuary and is an established access route for cockle and shrimp fisheries, as well as for dog walkers and other accessing the sands. Due to the proximity to the saltmarsh there is the potential for the activity to disturb the birds on the saltmarsh which at certain times of year use the marsh for nesting.

Information provided by the RSPB indicated that the species of birds nesting on the saltmarsh include redshank, ringed plover, oystercatcher, avocet, eider, shoveler, mallard, gadwall, skylark, meadow pipit and linnet. Discussions with Natural England and the RSPB about the nesting birds around the saltmarsh have been taken into consideration for the opening date of the fishery. The opening of the fishery will be on the 30<sup>th</sup> July to avoid the nesting period to avoid disturbance to nesting birds which can be particularly sensitive to disturbance.



Golden plover are only likely to feed in the intertidal areas when weather conditions are harsh and the ground is hard from frost on their normal inland feeding areas. Due to the fishing activity occurring in the summer it is unlikely that golden plover will be found near the fishery. Further to this from Natural England SPA seasonality tables golden plover are not typically at significant numbers during July and August further reducing any risk to the species.

Dunlin, black tailed godwit, bar tailed godwits, curlew and redshank mainly target mudflats as their feeding grounds. The fishing activity does not occur on or near to mudflats.

Oystercatcher, ringed plover, grey plover, knot, and sanderling all feed on a variety of substrates in the intertidal area. Waders will move in and out with the tide feeding in and on the sediment; each wader will have a preferred prey source and size. Access to and from the authorised area and fishing has the potential for disturbance. Visual disturbance to Oystercatcher, ringed plover, grey plover, knot, sanderling and turnstone will be minimal and any displacement temporary and short lived for the following reasons:

- The fishing is for one month.
- The fishery will be closed on weekend tides and the fishery will only be open one tide a day for the first two weeks, two tides a day for the third week and one tide a day for the last two weeks the fishery is open.
- All fishing will occur in daylight apart from three tides out of the thirty tides it is open.
- The fishing will only occur for two hours either side of low water when the bed is uncovered.
- The gatherers will only travel once to and from the fishing area per tide.
- All access is from one access point and by quad or tractor only.
- The fishing will be concentrated in a very small area (cockle bed is 0.38 sq. km).
- All other cockle beds within the European site are closed due to the closed season.
- From the seasonality table provided by Natural England in the Conservation Advice packages, ringed and grey plover are not typically in significant number in July further reducing the risk to these species.
- Wader numbers are greatest during the winter months

Shelduck, pintail and widgeon spend a proportion of their time feeding on intertidal mud. The fishing activity does not occur on or near to mudflats meaning disturbance is unlikely. Red throated diver, cormorant, scaup, red breasted merganser and common scoter spend the majority of time on the water, so there will be minimal to no disturbance from an intertidal fishery accessed from the shore. Whooper and Bewick swans and pink footed geese numbers are greatest during the winter, due to the timing of the fishery disturbance is likely to be minimal if any.

Lesser black-backed gull, little gull and black headed gull are present on both the intertidal and open water and therefore there is potential for visual disturbance from access and fishing of the authorised area. Visual disturbance to gulls will be minimal and any displacement temporary and short lived for the following reasons:

- Gulls utilise a range of habitats both marine and terrestrial.
- Gulls are often attracted to fishing activity and often benefit from an easy source of prey.
- The fishing is for one month.
- The fishery will be closed on weekend tides and the fishery will only be open one tide a day for the first two weeks, two tides a day for the third week and one tide a day for the last two weeks the fishery is open.
- All fishing will occur in daylight apart from three tides out of the thirty tides it is open.

- The fishing will only occur for two hours either side of low water when the bed is uncovered.
- The gatherers will only travel once to and from the fishing area per tide.
- All access is from one access point and by quad or tractor only.
- The fishing will be concentrated in a very small area (cockle bed is 0.38 sq. km).
- All other cockle beds within the European site are closed due to the closed season.

Common tern, and little tern rarely use the intertidal area at low water but will use the shallow areas covered by water. Tern species do nest in coastal areas but none of the known nest areas are access points for the fishery. Due to the location of the bed (not at the low water line, mid-way between high and low tide) it is unlikely that the fishing activity will disturb the terns while fishing in shallow water at low tide. Any disturbance is likely to be minimal as terns have large foraging range and will not be displaced a large distance by the fishing activity.

The NWIFCA is confident that visual disturbance to the SPA features will have no risk of adverse effect on the integrity or conservation status of the site.

**Table 2: Summary of Impacts**

Feature/Sub feature(s)	Conservation Objective	Potential pressure <sup>4</sup> (such as abrasion, disturbance) exerted by gear type(s) <sup>5</sup>	Potential ecological impacts of pressure exerted by the activity/activities on the feature <sup>6</sup> (reference to conservation objectives)	Level of exposure <sup>7</sup> of feature to pressure	Mitigation measures <sup>8</sup>
Intertidal sand and muddy sand	Maintain or restore the extent, distribution structure or function of the feature.	Litter	Litter could pose potential threat to wildlife, especially birds through ingestion or entanglement;	As in 6.1.2 (i)	None - current management measures sufficient with monitoring of the fishery
	Maintain or restore the extent, distribution structure or function of the feature.	Removal of target species	Potential to effect the:- - Presence and spatial distribution of the feature communities - Presence and abundance of typical species - The species composition of component communities	As in 6.1.2 (ii)	None - current management measures sufficient with monitoring of the fishery
<p><i>Salicornia</i> and other annuals colonising mud and sand; Glasswort and other annuals colonising mud and sand; Pioneer saltmarsh</p> <p>Atlantic salt meadows (<i>Glauco-Puccinellietalia maritimae</i>) (referred to as Saltmarsh)</p>	Maintain or restore the extent, distribution structure or function of the feature.	Litter	Litter could pose potential threat to wildlife, especially birds through ingestion or entanglement;	As in 6.1.2 (i)	None - current management measures sufficient with monitoring of the fishery
<p><i>Haematopus ostralegus</i>: Eurasian oystercatcher</p> <p><i>Calidris canutus</i>; Red knot</p> <p>Scaup</p> <p>Common Scoter</p>	Maintain or restore the population of each of the qualifying features, and, the distribution of the qualifying features within the site	Removal of target species (cockle)	Potential to effect the:- - Food availability - Condition and survival of SPA species - Abundance of SPA species	As in 6.2.2 (i)	None - current management measures sufficient with monitoring of the fishery

<sup>4</sup> Guidance and advice from NE.

<sup>5</sup> Group gear types where applicable and assess individually if more in depth assessment required.

<sup>6</sup> Document the sensitivity of the feature to that pressure (where available), including a site specific consideration of factors that will influence sensitivity.

<sup>7</sup> Evidence based e.g. activity evidenced and footprint quantified if possible, including current management measures that reduce/remove the feature's exposure to the activity.

<sup>8</sup> Detail how this reduces/removes the potential pressure/impact(s) on the feature e.g. spatial/temporal/effort restrictions that would be introduced.

<p>- <i>Cygnus columbianus bewickii</i>; Bewick's swan</p> <p>- <i>Cygnus Cygnus</i>; Whooper swan</p> <p>- <i>Anser brachyrhynchus</i>; Pink-footed goose</p> <p>- <i>Tadorna tadorna</i>; Common shelduck</p> <p>- <i>Anas Penelope</i>; Wigeon</p> <p>- <i>Anas crecca</i>; Eurasian teal</p> <p>- <i>Anas acuta</i>; Northern pintail</p> <p>- <i>Haematopus ostralegus</i>; Eurasian oystercatcher</p> <p>- <i>Charadrius hiaticula</i>; Ringed plover</p> <p>- <i>Pluvialis apricaria</i>; European golden plover</p> <p>- <i>Pluvialis squatarola</i>; Grey plover</p> <p>- <i>Calidris canutus</i>; Red knot</p> <p>- <i>Calidris alba</i>; Sanderling</p> <p>- <i>Calidris alpina alpina</i>; Dunlin</p> <p>- <i>Calidris pugnax</i>; Ruff</p> <p>- <i>Limosa limosa</i>; Black-tailed godwit</p> <p>- <i>Limosa lapponica</i>; Bar-tailed godwit</p> <p>- <i>Larus fuscus</i>; Lesser black-backed gull</p> <p>- <i>Sterna hirundo</i>; Common tern</p> <p>Liverpool Bay SPA features not been assessed elsewhere:-</p> <p>- Red throated diver</p> <p>- Little gull</p> <p>- Little tern</p> <p>Waterbird assemblage (whimbrel, curlew, cormorant, Red breasted merganser, scaup, common scoter)</p> <p>Seabird assemblage (black-headed gull)</p>	<p>Maintain or restore the population of each of the qualifying features, and, the distribution of the qualifying features within the site</p>	<p>Visual disturbance</p>	<p>Potential to effect the:-</p> <ul style="list-style-type: none"> <li>- Condition and survival of SPA species</li> <li>- Abundance of SPA species</li> <li>- Extent and distribution of supporting habitat available whilst a fishing activity is occurring</li> </ul>	<p>As in 6.2.2(ii)</p>	<p>None - current management measures sufficient with monitoring of the fishery</p>
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## 7. Conclusion<sup>9</sup>

The authorisation, management and mitigation measures incorporated into this fishery, and the use of an effective enforcement team of NWIFCA Officers with multi-agency support, allows the NWIFCA to conclude that the undersize cockle hand-gathered fishery in the closed season at North Penfold cockle bed in the Ribble Estuary will not have an adverse effect on the integrity of the European Site.

## 8. In-combination assessment<sup>14</sup>

### 8.1 Other ongoing and Authorised Fisheries to be Included in the In-combination assessment:

Key information for the in-combination assessment has been collated below for the assessment; a full copy of the HRAs reference below can be located on NWIFCA website, link below.

<https://www.nw-ifca.gov.uk/marine-protected-areas/hra/>

#### NWIFCA-RA-SPA-002 – Shrimp Trawling

- Four intertidal commercial shrimp operators, 100 – 180 tides per year, 3.150 sq. km (2.55%), low tide.
- Southport and Formby area.
- One vessel – 4.857 sq. km (3.94%), almost exclusively subtidal, no subtidal features designated.
- Occurs on sand and muddy sand habitat.
- Main fishing time spring to autumn with a lull June – July.

#### NWIFCA-RA-SPA-005 – Pot and Creels

- One commercial vessel using less than 20 pots, subtidal fishery only on the edge of the boundary and to the south of site

#### NWIFCA-RA-SPA-006 – Static Fixed Netting

- Intertidal nets October to June.
- Vessel netting has increased due to the ban of using drift nets to catch bass meaning vessels engaged in drift netting now use fixed nets - 7 vessels, 4 full time, 3 part time, April – November, mainly targeting bass.

#### NWIFCA-RA-SPA-007 – Drift Netting

- Very little drift netting due to new bass regulations, most have changed to static netting

#### Size Mussel Fishery

- Ribble training walls – 6 people maximum 240kg each, spring tides only. Effort will be either the mussel fishery or cockle fishery

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<sup>9</sup> If conclusion of adverse effect alone an in-combination assessment is not required.

### 8.1.2 In Combination Assessment

Pressures and features assessed within the in combination assessment.

#### Size mussel fishery - removal of target species (cockles) for oystercatcher, knot, scaup, common scoter

The fishery is only being authorised due to the high likelihood that the cockle in its current state is likely to suffer high mortality rates over the summer and autumn. The fishing will thin the bed out and potentially give the best chance of survival to the remaining cockle therefore when considering in combination effects of the removal of target species for SPA species that utilise bivalve as a prey source NWIFCA considers the in-combination effects of removal of target species (cockle) from the intertidal sand and muddy sand will have no risk of adverse effect on the integrity or conservation status of the site, and may possible even benefit.

#### All fisheries mentioned in section 8.1 above – visual disturbance all SPA feature

There is no access to the fishery by vessel and due to the location of the cockle bed, mid shore and away from the main Ribble and Alt river channels, it is very unlikely that fishing and access to and from the fishery by quadbike/ tractor will disturb the birds whilst on the water, meaning there will be no increase to disturbance to those birds whilst on the water. There is also likely to be a decrease in boat activity whilst the cockle fishery is open as some of those who fish for other species by vessel also hold a Byelaw 3 permit and are likely to be fishing for cockles.

Intertidal netting occurs October to June and therefore there is no cross over with the cockle fishery. There is potential for in-combination effects with the intertidal shrimping using a tractor. Due to the following reasons the NWIFCA considers the in-combination effects of visual disturbance will have no risk of adverse effect on the integrity or conservation status of the site.

- Combined area of fishing is 3.530 sq. km (3.150 sq. km for intertidal shrimping and the cockle bed area is 0.38 sq. km) which equates to 2.86% of the total area of the SPA. This figure does not take into account access to and from the fishery.
- The cockle fishery will be closed on weekend tides and the fishery will only be open one tide a day for the first two weeks, two tides a day for the third week and one tide a day for the last two week the fishery is open. The shrimp fishery will not occur on all days and all tides whilst the cockle fishery is open.
- All cockle fishing will occur in daylight apart from three tides out of the thirty tides it is open with the majority of the shrimp fishing occurring in the daylight.
- All fishing will only occur for two hours either side of low water.
- Access to and from the cockle and shrimp fishery will only be once per tide.
- All access to the cockle fishery is from Haul Road and by quad or tractor only and access to shrimp fishery is via Weld Road and by tractor.
- The cockle fishery is only for one month, avoiding the main overwinter period for birds.
- Golden plover are only likely to feed in the intertidal areas when weather conditions are harsh and the ground is hard from frost on their normal inland feeding areas. Due to the fishing activity occurring in the summer it is unlikely that golden plover will be found near the fishery. Further to this from Natural England SPA seasonality tables golden plover are not typically at significant numbers during July and August further reducing any risk to the species.
- Dunlin, black tailed godwit, bar tailed godwits, curlew and redshank mainly target mudflats as their feeding grounds. The fishing activities do not occur on or near to mudflats.

- From the seasonality table provided by Natural England in Conservation Advice packages ringed and grey plover are not typically in significant number in July further reducing the risk to these species.
- The cockle fishery has been planned to avoid the nesting period on the saltmarsh.

## **9. Summary of consultation with Natural England**

See below.

## **10. Integrity test**

The NWIFCA concludes no adverse effect on the integrity of the European Site providing the management measures of the North Penfold authorised cockle fishery 2018 are implemented and upheld.

## Annex 1: Reference list

Atkinson, PW *et al.* 2003. Changes in commercially fished shellfish stocks and shorebird populations in the Wash, England. *Biol Con*, 114, 127-141

Bell, MC *et al.* 2001. Fisheries and bird predation as components of cockle (*Cerastoderma edule*) mortality in the Burry Inlet, South Wales. In: *The Life History, Dynamics and Exploitation of Living Marine Resources: Advances in Knowledge and Methodology* CM 2001/J:02 ICES

Goss-Custard JD *et al.* 2004. When enough is not enough: shorebirds and shellfishing. *Proc R Soc Lond B* 271, 233-237

Natural England Marine Protected Areas Conservation Advice Packages for the Ribble and Alt Estuaries Special Protection Area (UK9005103)

- Ribble and Alt Estuaries Special Protection Area: site information
- Ribble and Alt Estuaries SPA: supplementary advice on qualifying features
- Ribble and Alt Estuaries SPA: advice on operations – the impact of marine activity on sensitive features

## Annex 2: Natural England's consultation advice

Email correspondents with NE (available on request)

27<sup>th</sup> June 2018

HRA sent to NE for comment

9<sup>th</sup> July 2018

Comments received from Hannah Birtles (NE) on HRA

10<sup>th</sup> July 2018

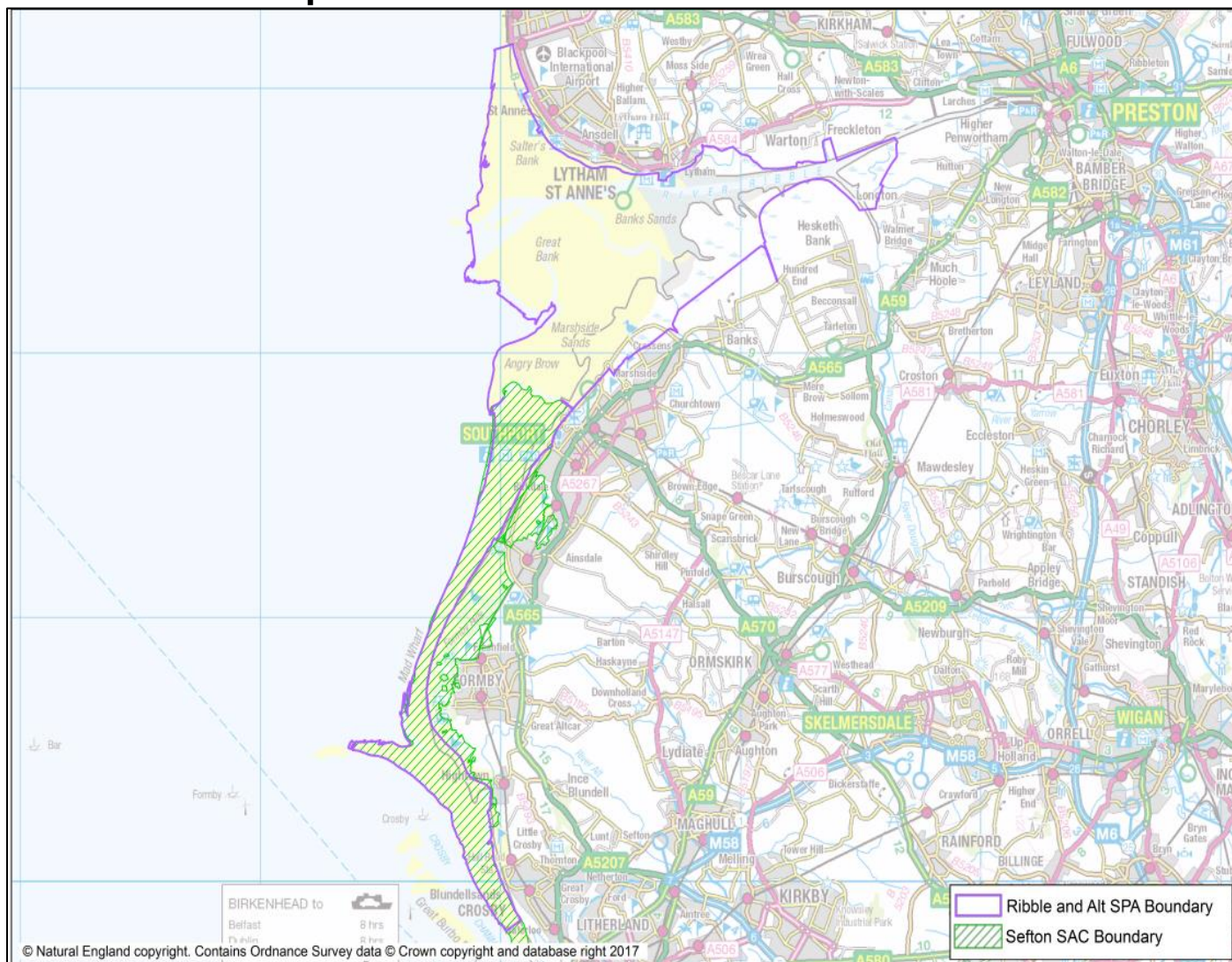
HRA amended by NWIFCA to incorporate comments for NE, amended HRA sent to NE.

11<sup>th</sup> July 2018

Email received from Hannah Birtles (NE) containing agreement that all NE comments have been addressed.



## Annex 3: Site Map



## Annex 4: NWIFCA Authorisation



### AUTHORISATION TO FISH COCKLE (SIZE AND UNDERSIZE) IN THE CLOSE SEASON FROM NORTH PENFOLD, RIBBLE ESTUARY 2018

**All Current NWIFCA Byelaw 3 Permit Holders**

**With effect from: 30<sup>th</sup> July 2018**

**Issue Date: 10<sup>th</sup> July 2018**

**Expiry Date: 31<sup>st</sup> August 2018**

All current Byelaw 3 permit holders are hereby authorised, under Byelaw 3, paragraph 6 (Minimum Sizes) and paragraph 12 (Fisheries Closure) to fish for cockle (Size and Undersize) from the North Penfold cockle bed located on the South side of the Ribble, ***within the areas as defined in paragraph 2, and during the times defined in paragraph 3,*** and are responsible for complying with the conditions given below at ***paragraph 1.***

#### **1. Conditions of Authorisation**

This authorisation is issued subject to the following conditions.

- (a) It is only valid for the period from the **30/07/18** to the expiry date **31/08/18**, **excluding Bank Holiday Monday 27<sup>th</sup> August 2018.**
- (b) The authorisation is only valid for current Byelaw 3 permit holders. It does not allow any other person to take or remove cockle.
- (c) That fishing shall only take place within the areas specified. Annex A
- (d) That fishing shall only take place on the days and tides specified.
- (e) That the cockles shall only be gathered by hand or with a rake.
- (f) Access to the fishery shall be by tractor or ATV only. Access by boat is not authorised.
- (g) Access to the fishery must be via the Haul Road track at Marshside. All other access routes from the Fylde and Sefton coast will be closed to cockle fishers. Annex B
- (h) All vehicles must be parked on Haul Road, no parking within the RSPB Marshside Carpark. Annex B. Vehicles **MUST** be removed between tides and no equipment left.
- (i) All cockles must be tonned up on the Haul Road. Annex B
- (j) There shall be no access over or activity of any kind on the saltmarsh. Any damage may lead to prosecution and the closure of the fishery (see 4b below).
- (k) Any fishing taking place under this authorisation shall be carried out in accordance with the Authority's Code of Conduct for Intertidal Shellfisheries, including responsibility for littering.
- (l) This authorisation does not exonerate the holder from other sea fisheries legislation, nor does it prejudice any other consents the holder may need to obtain, nor does it override or provide permission to go over private land.

## 2. Definition of Authorised Area

Part of the area in the Ribble Estuary known as North Penfold cockle bed as illustrated on the map attached at Annex A, and bound by the co-ordinates below:

Point	Latitude (d.d)	Longitude (d.d)	Latitude (d m.m)	Longitude (d m.m)
A	53.722431	-3.018792	53° 43.345" N	3° 01.127" W
B	53.722626	-2.995641	53° 43.357" N	2° 59.738" W
C	53.699983	-2.995107	53° 41.998" N	2° 59.706" W
D	53.699788	-3.018245	53° 41.987" N	3° 01.094" W

## 3. Definition of Authorised Days and Tides:

NWIFCA North Penfold Cockle Fishery 2018 Authorised Days and Tides								
Month	Date	Day	Low Water Information					
			AM Tide		PM Tide			
			Time	Height (m)	Time	Height (m)		
July	30 <sup>th</sup>	Mon	08:03	1.7	No Fishing PM Tides			
	31 <sup>st</sup>	Tue	08:37	1.7				
August	1 <sup>st</sup>	Wed	09:12	1.8			No Fishing Weekend Tides	
	2 <sup>nd</sup>	Thu	09:47	1.9				
	3 <sup>rd</sup>	Fri	10:24	2.2				
	4 <sup>th</sup>	Sat	No Fishing Weekend Tides					
	5 <sup>th</sup>	Sun						
	6 <sup>th</sup>	Mon	No Fishing AM Tides		13:06	2.8		
	7 <sup>th</sup>	Tue			14:28	2.6		
	8 <sup>th</sup>	Wed			15:42	2.3		
	9 <sup>th</sup>	Thu			16:46	1.8		
	10 <sup>th</sup>	Fri			17:45	1.4		
	11 <sup>th</sup>	Sat	No Fishing Weekend Tides					
	12 <sup>th</sup>	Sun						
	13 <sup>th</sup>	Mon	8:04	0.3	20:15	0.8		
	14 <sup>th</sup>	Tue	8:50	0.3	20:58	0.9		
	15 <sup>th</sup>	Wed	9:33	0.6	21:39	1.3		
	16 <sup>th</sup>	Thu	10:13	1.1	22:20	1.8		
	17 <sup>th</sup>	Fri	10:54	1.7	23:03	2.3		
	18 <sup>th</sup>	Sat	No Fishing Weekend Tides					
	19 <sup>th</sup>	Sun						
	20 <sup>th</sup>	Mon	No Fishing AM Tides		13:42	3.3		
	21 <sup>st</sup>	Tue			14:57	3.2		
	22 <sup>nd</sup>	Wed			16:00	3.0		
	23 <sup>rd</sup>	Thu			16:52	2.7		
	24 <sup>th</sup>	Fri			17:34	2.3		
	25 <sup>th</sup>	Sat	No Fishing Weekend Tides					
	26 <sup>th</sup>	Sun						
	28 <sup>th</sup>	Tue	07:43	1.5	No Fishing PM Tides			
	29 <sup>th</sup>	Wed	08:16	1.4				
30 <sup>th</sup>	Thu	08:49	1.5					
31 <sup>st</sup>	Fri	09:22	1.7					

#### 4. Advisory Notes

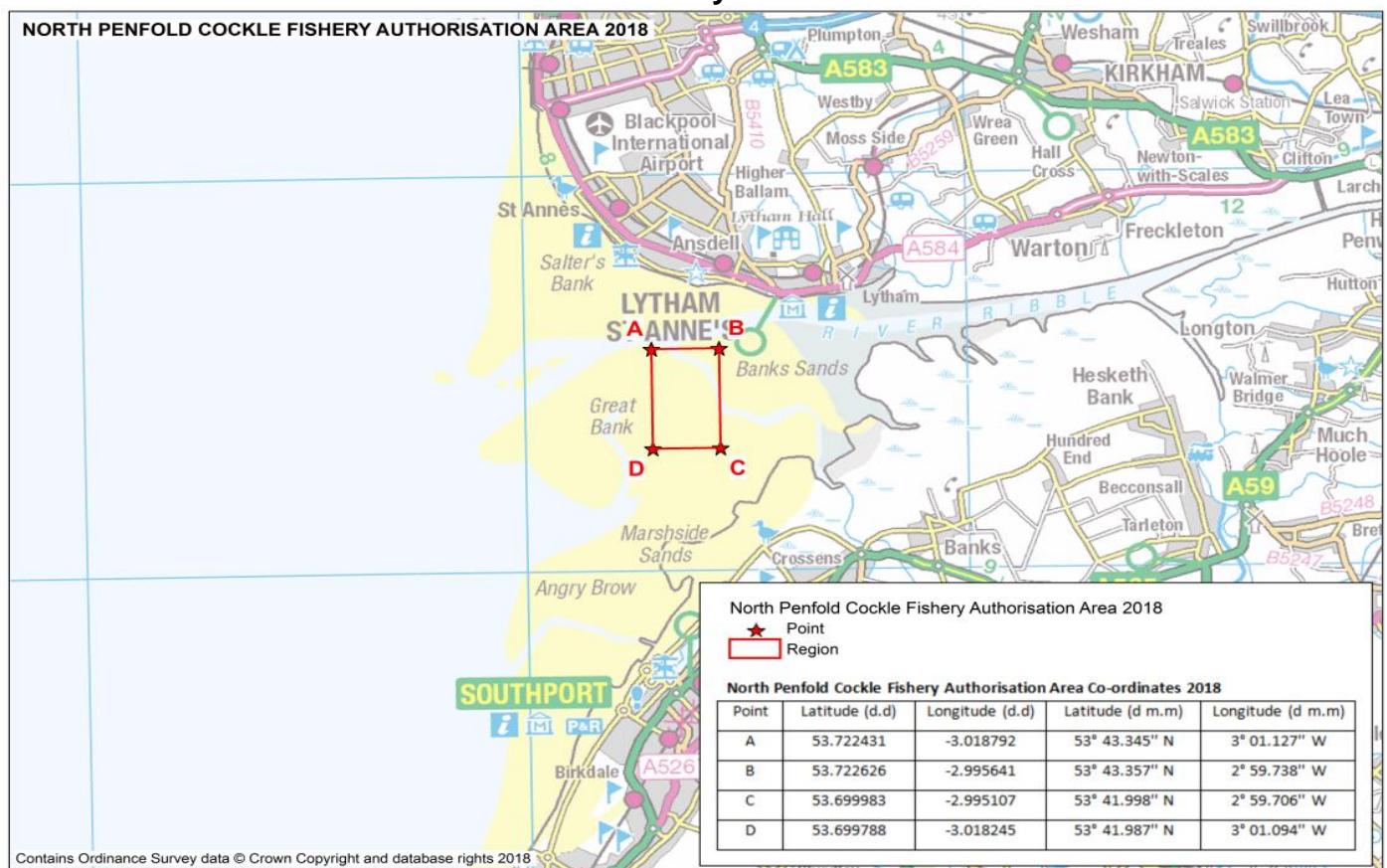
- (a) NWIFCA officers have the power to withdraw authorisations at any point should the need arise, and will consult with Natural England throughout the duration of the fishery to ensure no risk to any of the conservation features in the Ribble Estuary.
- (b) Saltmarsh is a protected feature and causing any damage could lead to a fine of up to £20,000, revoking of authorisations and **closure of the fishery**.
- (c) All vehicles accessing the beach will require a Beach Access Permit from Sefton Borough Council.
- (d) Registration (movement) documents must be obtained from West Lancashire Borough Council Environmental Health Department prior to the opening of the fishery. Do not leave this to the last minute.

This authorisation may be revoked by the NWIFCA at any time and any breach of the terms or conditions of this authorisation shall make it null and void.

By Order of the Authority

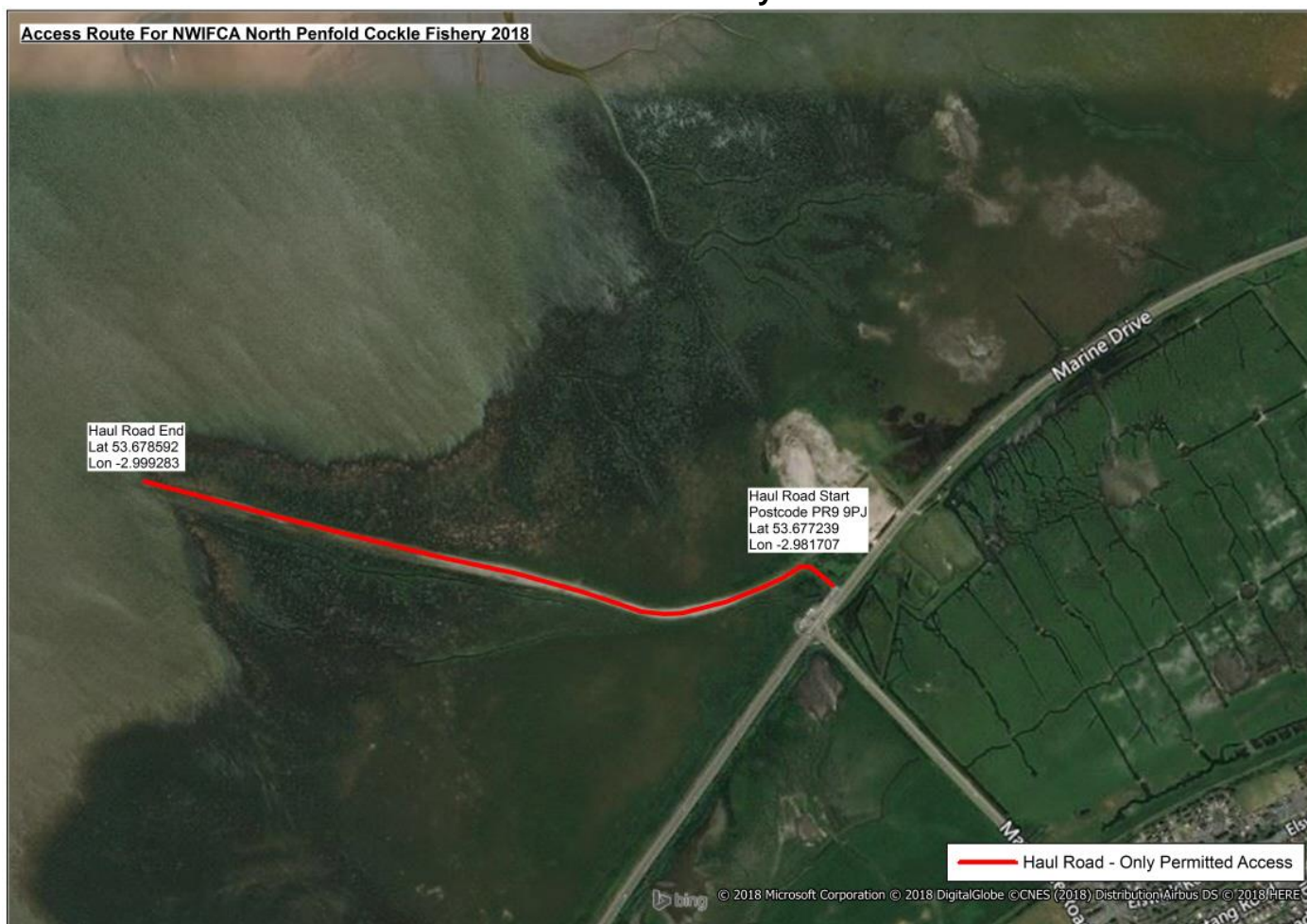
STEPHEN ATKINS  
Chief Executive

#### Annex A North Penfold Cockle Fishery Authorisation Area 2018



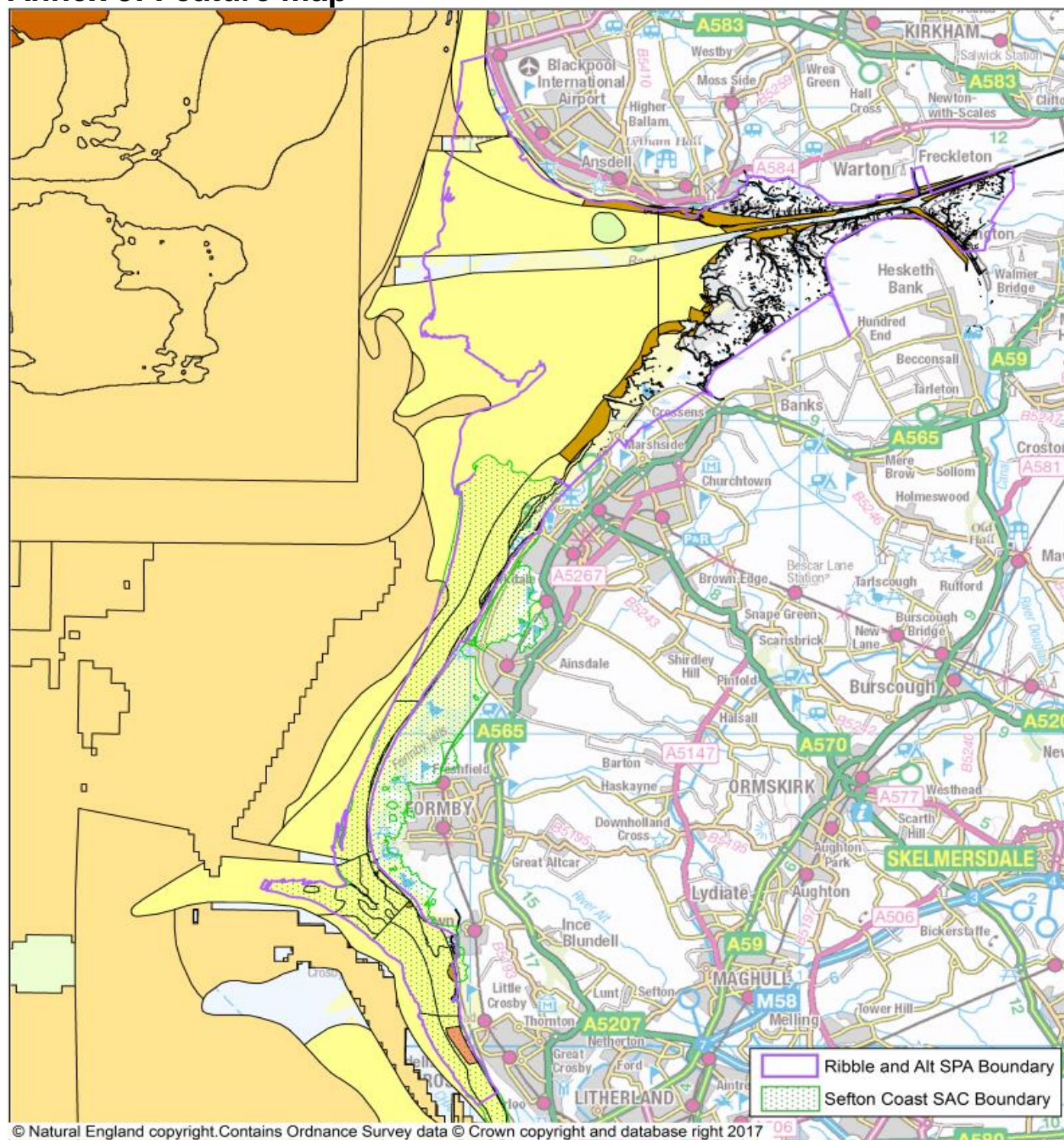


## Annex B North Penfold Cockle Fishery Access Point





## Annex 5: Feature map



### Broad Scale Habitat

Eunis Code	EMS Subfeature	Common Name
A1	Intertidal rock	
A2.1	Intertidal coarse sediment	
A2.2	Intertidal sands and muddy sand	
A2.3	Intertidal mud	
A2.4	Intertidal mixed sediment	
A2.5	Saltmarsh	
A2.61	Intertidal seagrass bed	
A2.71	Intertidal biogenic reef. <i>Sabellaria</i> spp.	

Broad scale habitat data from Natural England December release

Eunis Code	EMS Subfeature	Common Name
A3	Infralittoral rock	
A4	Circalittoral rock	
A5.1	Subtidal coarse sediment	
A5.2	Subtidal sand	
A5.3	Subtidal mud	
A5.4	Subtidal mixed sediment	
SF_SH_5	Intertidal biogenic reef, mussel bed	
SF_SH_6	Subtidal biogenic reef, mussel bed	

## Annex 6: Byelaws regulating cockle fishing in Morecambe Bay

### NWIFCA BYELAW 3 - PERMIT TO FISH FOR COCKLES (*Cerastoderma edule*) AND MUSSELS (*Mytilus edulis*)

#### Interpretation

1. In this byelaw:
  - a. “cockles” means the species *Cerastoderma edule*;
  - b. “mussels” means the species *Mytilus edulis*;
  - c. “fishery” means an area of sea, seabed, exposed estuary, seashore, or other marine environment in any part of the District;
  - d. “the NWIFCA” means the North Western Inshore Fisheries and Conservation Authority and is defined in articles 2 and 4 of the North Western Inshore Fisheries and Conservation Order 2010 (S.I. 2010 No. 2200);
  - e. “the District” means North Western Inshore Fisheries and Conservation District and is defined in articles 3 and 4 of the North Western Inshore Fisheries and Conservation Order 2010 (S.I. 2010 No. 2200);
  - f. “full gathering permit” means a permit which authorises a person to gather cockles and mussels and carry out all related activities, such as moving them and transporting them;
  - g. “support worker permit” means a permit which authorises a person to carry out activities related to the gathering of cockles and mussels, such as moving them and transporting them to support a person with a full gathering permit but only after the cockles and mussels have been placed in a receptacle, and in the case of cockles after having been passed through a riddle, by person with the full gathering permit;
  - h. “gathering” includes all activities related to the gathering of cockles and mussels such as moving and transporting them;
  - i. “Commercial Shellfish Fisheries Area” means an area designated by the NWIFCA pursuant to paragraph 13;
  - j. “Morecambe Bay Commercial Fisheries Area” means the area enclosed by straight lines joining the following co-ordinates in order:
    - I. 54° 08.490’N 03° 02.011’W
    - II. 54° 07.686’N 02° 53.497’W
    - III. 54° 03.204’N 02° 56.331’W
    - IV. 54° 04.062’N 03° 03.776’W
    - V. 54° 08.490’N 03° 02.011’W
  - k. “Ribble Estuary Commercial Fisheries Area” means the area enclosed by straight lines joining the following co-ordinates in order:
    - I. 53° 43.008’N 03° 05.177’W
    - II. 53° 43.572’N 02° 59.986’W
    - III. 53° 40.902’N 03° 00.341’W
    - IV. 53° 40.860’N 03° 05.122’W
    - V. 53° 43.008’N 03° 05.177’W
  - l. “Gangmaster Licensing Authority licence” means a licence issued under the Gangmasters Licencing) Act 2004;
  - m. “Foreshore Gatherers Safety Training Certificate” means a document issued by a Seafish Industry Group Training Association or a trainer approved by the NWIFCA, certifying that the person named on the certificate has completed a safety training course for intertidal shellfishing.

## **Permit**

2. Subject to paragraphs 10, 11, 25 and 26 of this byelaw no person shall gather cockles or mussels within or from a fishery unless he has in his possession a full gathering permit.
3. Subject to paragraphs 10, 11, 25 and 26 of this byelaw, no person shall, in the area of the District below mean high water springs, move or transport cockles or mussels within or from a fishery unless he has either a full gathering permit or a support worker permit.
4. No person shall have in their possession any article for use in the course of or in connection with gathering cockles or mussels within or from a fishery in breach of this byelaw.
5. No person shall have in their possession any cockle or mussel gathered within or from a fishery in breach of this byelaw.

## **Minimum Sizes**

6. No person shall gather within or from a fishery any cockle which will pass through a gauge having a square opening of 20mm measured across each side of the square or any mussel less than 45mm in length.

## **Fishing Methods**

7. No person shall gather cockles or mussels except:
  - a) by hand or using hand-held rakes;
  - b) in the case of cockles by using craams, rakes, spades, tamps or jumbos; or
  - c) by using buckets, sacks, net bags, ton bags and other such containers ordinarily used for the storage of cockles and mussels.
8. No person shall place cockles that have just been fished into a container unless they have been passed through a rigid riddle designed to retain cockles which will not pass through a gauge having a square opening of 20mm measured across each side.

## **Redeposit**

9. Any person who removes or possesses shellfish the removal or possession of which is prohibited by or in pursuance of these byelaws or any Act of Parliament shall immediately redeposit the same without injury as nearly as possible in the fishery from which they were taken or under the written authority of the NWIFCA on another suitable fishery and shall spread them thinly and evenly through the fishery.

## **Written permission**

10. This byelaw shall not apply to any person performing an act which would otherwise constitute an offence against this byelaw if that act was carried out in accordance with a written permission issued by the NWIFCA permitting that act for scientific, management, stocking or breeding purposes.

## **Exception for Personal Consumption to the Requirement for a permit**

11. No person shall require a permit under this byelaw to gather less than a total of 5kg of cockles and 5kg of mussels during a calendar day intended for their own personal consumption within or from a fishery which is neither closed pursuant to paragraph 12 of this byelaw or byelaw 13A of the North Western and North Wales Sea Fisheries Committee (cockles and mussels – management of the fishery) or byelaw 18 of the Cumbria Sea Fisheries Committee (shellfishery – temporary closure) nor designated a Commercial Shellfish Fishery Area pursuant to paragraph 13 of this byelaw nor part of the District managed under the Dee Estuary Cockle Fishery Order (2008).

## **Fisheries Closure**

12. No person shall gather any cockle within or from a fishery on or between the 1<sup>st</sup> day of May and the 31<sup>st</sup> day of August in the same year or have in their possession any cockle or mussel from a fishery area that has been closed pursuant to byelaw 13A of the North Western and North Wales Sea Fisheries Committee (cockles and mussels – management of the fishery) or byelaw 18 of the Cumbria Sea Fisheries Committee (shellfishery –



temporary closure) or from within that part of the District managed under the Dee Estuary Cockle Fishery Order (2008) without a licence to fish issued within the terms of that Order.

### **Commercial cockle or mussel fisheries**

13. The NWIFCA designates the Morecambe Bay Commercial Fisheries Area and the Ribble Estuary Commercial Fisheries Area as Commercial Shellfish Fisheries Areas.

### **Application for Permits**

14. The period of validity of permits shall be from 1<sup>st</sup> September in any given year to 31<sup>st</sup> of August the following year unless otherwise stated. Permits shall be annually renewable subject to paragraph 15 of this byelaw. A fee of £500 will be charged each year by the NWIFCA for all Byelaw 3 permits.
15. Holders of a permit to gather cockles or mussels under this byelaw in any given year shall be entitled to renew the permit for the next year up to one year after the permit term has expired.
16. Applications for the renewal of permits pursuant to this byelaw shall be made using the printed forms available from the NWIFCA offices or the NWIFCA website. Renewal forms will be made available 2 calendar months before the date each permit term begins. On renewal, applicants must satisfy the NWIFCA that at some time in the previous 3 years they have derived a substantial part of their income from fishing activities by providing evidence which may include a personal statement detailing fishing activities in the last 3 years and evidence that tax has been paid on fishing income in the last 3 years.
17. Applications for new permits pursuant to this byelaw shall be made using the printed forms available from the NWIFCA offices or the NWIFCA website. Applications for new permits to be issued pursuant to paragraphs 22 and 27 of this byelaw shall be made by first registering an interest with the NWIFCA in writing. If the number of applicants registering an interest exceeds the number of available permits a waiting list will be compiled on a 'first come, first served' basis and an applicant will be invited to complete an application for a new permit in the first year a new permit becomes available. Applications shall meet all the requirements of paragraph 22 in the case of full gathering permits and paragraph 27 in the case of support worker permits.
18. A permit issued pursuant to this byelaw is not transferable.
19. Failure to produce, on the reasonable demand of a properly warranted Officer or a Constable, a valid permit when carrying out any activity for which a permit is required constitutes a breach of this byelaw.
20. Failure to notify the NWIFCA of any change of name or address during the period of the validity of a permit constitutes a breach of this byelaw.

### **Filing returns**

21. The holder of a permit to gather cockles or mussels under this byelaw shall be required to file with the NWIFCA, no later than the 5<sup>th</sup> day of the month following, such information in regard to catches and fishing effort for the previous month, under the terms of such permit, as the NWIFCA may require. Nil returns may be required at the discretion of the NWIFCA. Permit holders not filing returns may have their permits suspended by the NWIFCA until returns have been filed.

### **New Permits**

22. New full gathering permits shall be issued each year to a maximum of the first 10 applicants on the waiting list who have not held a permit pursuant to this byelaw in the previous year on production of :
  1. evidence of the applicant's identity, containing photograph and signature, such as a valid passport; or a driving licence with photo;
  2. evidence of the applicant's address, such as a utility bill issued in the preceding 4 months of application or a current tenancy agreement;
  3. evidence of the applicant's National Insurance Number;
  4. 2 recent passport style photographs of the applicant signed on the back by the applicant;
  5. the applicant's valid Foreshore Gatherers Safety Training certificate or proof of the successful completion of an equivalent safety training course. Equivalence is determined at the discretion of the NWIFCA; and
  6. payment of the fee set in paragraph 14.

## Transitional Arrangements

23. Holders of a permit for 2011/2012 issued under byelaw 5 of the NWIFCA (permit to fish for cockles (*Cerastoderma edule*) and mussels (*Mytilus edulis*)) shall be entitled to renewal of that permit under this byelaw 3 for the year 2012/2013.
24. Permits to fish for cockles and mussels for the year 2012/2013 shall be issued to 40 new applicants under the rules set out in Byelaw 5 of the NWIFCA (permit to fish for cockles (*Cerastoderma edule*) and mussels (*Mytilus edulis*)). No permits to fish for cockles and mussels shall be issued to new applicants under this byelaw 3 for the year 2012/2013.
25. Persons who provide evidence to the satisfaction of the NWIFCA that they have in the past held a permit issued under Cumbria Sea Fisheries Committee byelaw 21 (cockles – permit scheme) or 23 (mussels – permit scheme) and have in the past been engaged in commercial cockle or mussel fishing activities in a specified region or regions within the district formerly administered by the Cumbria Sea Fisheries Committee shall be eligible to apply to the NWIFCA for written authority to continue to fish in any fisheries within that region or regions. The obligations in this byelaw apply to a person fishing under a written authority but no fee is payable for the issue of that authority.
26. Persons who provide evidence to the satisfaction of the NWIFCA that they have in the past been engaged in commercial cockle or mussel fishing activities in a specified region or regions within the Dee Estuary shall be eligible to apply to the NWIFCA for written authority to continue to fish in any fisheries within that region or regions. The obligations in this byelaw apply to a person fishing under a written authority but no fee is payable for the issue of that authority.

## Support worker permit

27. Commercial organisations trading in cockles and mussels may apply to the NWIFCA for permits for specified members of staff who they wish to perform ancillary trading activities within a cockle or mussel fishery which would constitute taking, removing or transporting cockles or mussels within or from a fishery including driving transport vehicles, transporting shellfish, weighing shellfish. The NWIFCA may issue up to a maximum of 6 support worker permits to each commercial organisation upon receipt of complete applications on production of:
  - The names, contact details, national insurance numbers and proof of right to work of the members of staff. Proof of identity of those members of staff containing photograph and signature, such as a valid passport; or a driving licence with photo and proof of address of those members of staff, such as a recent utility bill;
  - Proof from the annual account or annual report of the organisation's trade in cockles or mussels;
  - Evidence that the organisation holds a Gangmaster Licensing Authority licence for shellfish operations if required;
  - Statement of the duties members of staff will perform in the shellfish fishery;
  - Two recent passport style photographs of the members of staff signed and dated on the back by the members of staff;
  - Valid Foreshore Gatherers Safety Training certificates for each of the members of staff or proof of the successful completion of an equivalent safety training course. Equivalence is decided at the discretion of the NWIFCA; and
  - Payment of the fee set in paragraph 14.

## Use of boats

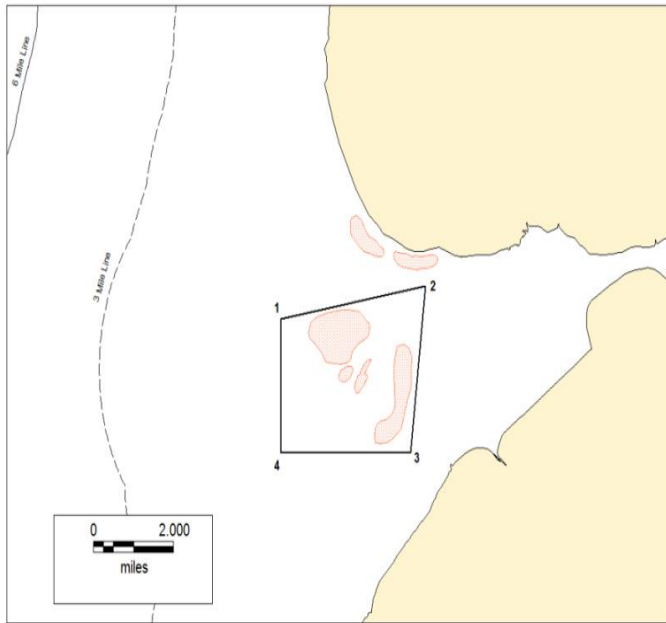
28. No holder of a permit pursuant to this byelaw shall use a boat to access shellfish beds in order to gather, remove or transport cockles or mussels without having their permit endorsed as a boat user by the NWIFCA. The NWIFCA will endorse permits as boat users on production of evidence that the holder has completed training of an equivalent standard to the courses provided by Seafish in: Sea Survival, First Aid, Fire Fighting and Health and Safety Awareness. Equivalence is decided at the discretion of NWIFCA.
29. No person shall be granted an endorsement as a boat user unless they have in their possession a serviceable life jacket and the boat they will use is equipped with a serviceable means of communication such as a VHF radio or mobile telephone, a serviceable means of navigation such as global positioning equipment and serviceable safety provision including marine distress flares and an adequate anchor with a means of effective deployment.

## Revocation of Legacy Byelaws

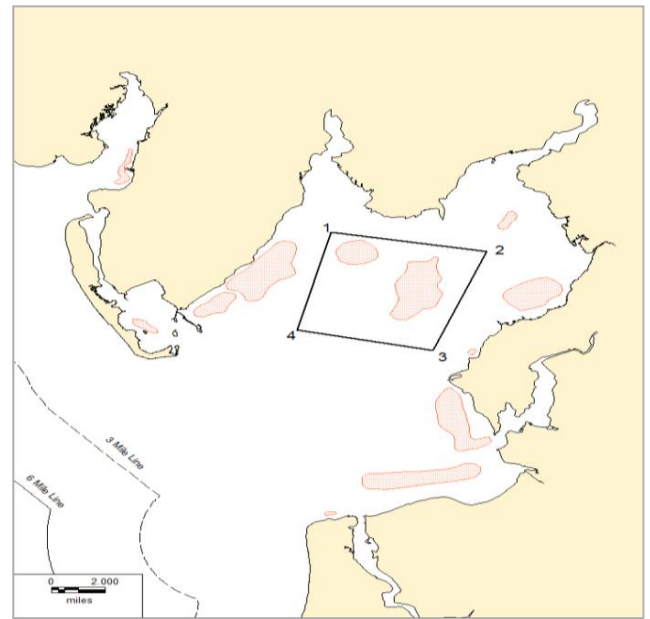
30. Byelaw 5 (permit to fish for cockles (*Cerastoderma edule*) and mussels (*Mytilus edulis*)) made by the NWIFCA is revoked.
31. The following byelaws made by the North Western and North Wales Sea Fisheries Committee are revoked in so far as they apply within the District:
- (a) byelaw 5 (permit to fish for cockles (*Cerastoderma edule*) and mussels (*Mytilus edulis*));
  - (b) byelaw 13 (cockles – minimum size);
  - (c) byelaw 14 (cockle fishery – seasonal closure);
  - (d) byelaw 15 (mussels – minimum size);
  - (e) byelaw 17 (redeposit of shellfish);
32. The following byelaws made by the Cumbria Sea Fisheries Committee are revoked in so far as they apply within the District:
- (a) byelaw 5 (minimum removal size for mussels);
  - (b) byelaw 6 (minimum removal size for cockles);
  - (c) byelaw 12 (re-depositing of shellfish);
  - (d) byelaw 16 (cockles - seasonal closure).
  - (e) byelaw 21 (cockles - permit scheme)
  - (f) byelaw 22 (cockles - catch restrictions)
  - (g) byelaw 23 (mussels - permit scheme)
  - (h) byelaw 24 (mussels – catch restrictions)

### Explanatory Note: (This note does not form part of the byelaw)

1. *The purpose of this byelaw is to control the exploitation of shellfish fisheries of cockles and mussels to ensure catches remain at a sustainable level and are obtained by sustainable fishing methods. As cockle and mussel fishing can be highly lucrative depending on price variations the NWIFCA has concluded a permit scheme is necessary to limit the number of fishermen and consequently the number of cockles gathered, along with the methods they use.*
2. *The byelaw prohibits the gathering of cockles or mussels for sale without a full gathering permit and prohibits the moving and transporting of cockles or mussels for sale below mean high water springs without a support worker permit (paragraphs 2 and 3). The full gathering permit also permits the holder to move and transport cockles or mussels below mean high water springs (definition of 'full gathering permit' in paragraph 1).*
3. *The byelaw prohibits the possession of articles to gather cockles or mussels in breach of the byelaw and specifies the fishing methods that may be used (paragraphs 4, 7 and 8).*
4. *The byelaw prohibits the possession of cockles or mussels gathered in breach of the byelaw (paragraph 5) and provides for their redeposit (paragraph 9).*
5. *The byelaw sets minimum sizes for cockles and mussels (paragraph 6).*
6. *The byelaw provides an exemption for a person who carries out an act which would otherwise constitute an offence if it is in accordance with a written permission issued by the NIFCA permitting that act for scientific, stocking or breeding purposes (paragraph 10).*
7. *The byelaw provides that a person does not need a permit to gather less than 5kg of cockles or mussels for personal consumption from areas that are not closed or in Commercial Shellfish Fisheries Areas (paragraph 11).*
8. *The byelaw provides for the annual closure of cockle fisheries throughout the District for a specified period (paragraph 12).*
9. *The byelaw provides for the designation of certain cockle beds as Commercial Shellfish Fisheries Areas as shown in the indicative maps (paragraph 13).*



**Fig 1. Ribble Commercial Fisheries Area with known historical cockle beds**



**Fig 2. Morecambe Bay Commercial Fisheries Area with known historical cockle beds**

10. The byelaw provides an application procedure for permits (paragraphs 14 to 20).
11. The byelaw provides for permit holders to file returns (paragraph 21).
12. The byelaw provides for the renewal of permits and the issue of new permits (paragraph 22).
13. The byelaw provides transitional arrangements for those with a right to gather shellfish under existing byelaws (paragraphs 23 to 26).
14. The byelaw provides for the issue of support worker permits (paragraph 27).
15. The byelaw provides that a full gathering permit must be endorsed if the holder uses a boat to access shellfish beds (paragraphs 28 and 29).
16. The byelaw provides for the revocation of specified byelaws that previously applied in the District (paragraphs 30, 31, and 32).

The North Western Inshore Fisheries and Conservation Authority and the North Western Inshore Fisheries and Conservation District are defined in articles 2, 3 and 4 of the North Western Inshore Fisheries and Conservation Order 2012 (S.I. 2010 No. 2200).

Byelaw confirmed 23.08.12

#### **NWSFC BYELAW 12 - RESTRICTIONS ON FISHING FOR BIVALVE MOLLUSCAN SHELLFISH**

This byelaw applies to that part of the District within a line drawn on the seaward side of the baselines 6 nautical miles from the baselines from which the breadth of the territorial sea adjacent to the United Kingdom is measured. For the purposes of this paragraph "the baselines" means the baselines as they existed at 25th January 1983 in accordance with the Territorial Waters Order in Council 1964 (1965 III p.6452A) as amended by the Territorial Waters (Amendment) Order in Council 1979 (1979 II p.2866).

1. No person shall fish for bivalve molluscan shellfish, except
  - a) by hand; or
  - b) in the case of cockles with a craam, rake, spade or jumbo; or
  - c) in the case of mussels with a rake or in that part of the District which is inshore of a line drawn North true from Penmaen-Bach Point (Latitude 53° 17.3' North, Longitude 03° 52.8' West) to the high water

mark at Gt. Ormes Head with a rake, provided that the rake is no more than 1 metre in width and that it is only used from a boat when the mussel bed has at least 1 metre of water over it; or (*applies only to Wales*)

- d) when using a dredge or other appliance where:
  - (i) such dredge or appliance is of a pattern approved in writing by the Committee, the Committee having been advised by scientists who in the opinion of the Committee appear to be suitably qualified to comment on the conservation and environmental implications;
  - (ii) such use is in accordance with a written authorisation issued by the Committee and with any conditions subject to which that authorisation was issued, including prohibitions on use at particular times, or in particular areas and definitions of the fishing instrument. The Committee may also require as a condition that returns be made on the species and quantities of bivalve molluscan shellfish taken.
- 2. no person shall take or use on any mussel bed, any sledge or other contrivance which in the opinion of the Committee is likely to crush or loosen the mussels or loosen the foundations of the bed, without a written authorisation issued by the Committee.
- 3. no person shall dig in any mussel bed for any purpose without a written authorisation issued by the Committee.

*Byelaw confirmed 21.01.98*

#### NWSFC BYELAW 13A - COCKLES AND MUSSELS -MANAGEMENT OF THE FISHERY

- 1. The Committee, may close any cockle (*Cerastoderma edule*) or mussel (*Mytilis edulis*) bed or part of a bed for the purposes of fishery management or for controlling the rate of exploitation with regard to cockles and mussels.
- 2. Such closure shall be for a specified period and be undertaken only after the Joint Committee has consulted such persons or bodies appearing to them to represent local cockle or mussel fishermen, and provided the Committee has been advised by fishery scientists who appear to them to be suitably qualified, as to the need for such action.
- 3. No person shall, without the consent of the Committee, under the written authority in that behalf signed by the Clerk, remove, take or disturb any cockle or mussel from a bed or part of a bed of cockles or mussels which has been closed pursuant to this byelaw.

*Byelaw confirmed 29.03.96*

#### NWSFC BYELAW 16 – SHELL FISHERY -TEMPORARY CLOSURE

Where, in the opinion of the Committee, in any fishery, any bed or part of a bed of shellfish is so severely depleted as to require temporary closure in order to ensure recovery, or any bed or part of a bed contains mainly immature shellfish which in the interests of the protection and development of the fishery ought not to be disturbed for the time being, or any bed of transplanted shellfish ought not to be fished until it has become established, and where the bed, or part thereof, has been clearly defined in notices displayed in the vicinity prohibiting the removal or disturbance of the shellfish, no person shall, while the bed or part thereof is so defined, take away or otherwise disturb any shellfish therein.

Provided that no bed or part of a bed may remain closed under this byelaw at any one time for a longer period than one year, without review by the Committee.

*Byelaw confirmed 14.09.73*

## Annex 7 – Code of Conduct for Intertidal Shellfisheries



### *North Western Inshore Fisheries and Conservation Authority*

### *Code of Conduct for Intertidal Shellfisheries*

Fishing for cockles and mussels on the shore is a long-established activity. In recent years the level of activity has increased, and there has been increasing public concern about it.

By observing this simple code of conduct you can help to reduce complaints and protect your own long-term interests.

#### **1. Treat the foreshore with respect**

Much of the foreshore is privately owned. Many landowners tolerate access to and from shellfisheries. This does not include the storage of fishing equipment or catches on private land. To protect your own interests:

- Don't damage gates, fences or signposts;
- Don't block access routes; and
- Get the landowner's agreement before storing any fishing equipment, vehicles or catches on private land.

#### **2. Use vehicles on the shore carefully**

Many landowners and coastal residents are concerned about the use of tractors, ATVs / Quad Bikes, and other vehicles on the shore. Try to minimise complaints by:

- Ensuring all vehicles are in good repair and have exhaust silencers;
- Keep noise to a minimum - especially early in the morning and at weekends;
- Avoid churning up mud at the top of the shore;
- Don't abandon vehicles on the shore.

#### **3. Leave the shore as you find it**

Frequent complaints are made about litter being left by fishermen. This includes food wrappers, cups, sacks used to transport shellfish, and shellfish dropped or discarded on the shore.

- Clear up any litter left at the end of the day;
- Don't leave unwanted shellfish or sacks lying around; and
- If storing gear or shellfish on the shore, make sure it doesn't impede access.

#### **4. Have regard for wildlife**

Much of the seashore is protected by wildlife designations. It is a criminal offence to harm protected wildlife. To avoid possible prosecution:

- Don't disturb bird nests or eggs;
- Avoid nature reserves;
- Don't take vehicles across areas of saltmarsh or seagrass; and
- Contact the NWIFCA office for advice if in any doubt.

#### **5. Fish sustainably**

IFCA byelaws protect the long-term future of shellfish stocks, and must be complied with at all times. Complying with byelaws protects your own future livelihood. You can help further by:

- Scattering riddled shellfish evenly back on the bed they were removed from - don't leave them in a heap;
- Avoid harming or gathering juvenile shellfish - they are the future of the fishery; and
- Ensure that vehicles used on the shore don't harm the shellfish beds.

#### **6. Observe other guidance & advice**

Other authorities may provide guidance relating to your activities. You should ensure that you are aware of:

- Guidance issued by local authorities and landowners concerning access and other issues;
- Guidance issued by the Health & Safety Executive and the Coastguard.

For further information, contact the NWIFCA at our Carnforth offices or visit [www.nw-ifca.gov.uk](http://www.nw-ifca.gov.uk)