#### NWIFCA-MB-EMS-UNDERSIZE MUSSEL HEYSHAM FLAT JULY 2018

Carried out by Mandy Knott. Senior Scientist. 5th July 2018

There is a long history of management of hand-gathered seed mussel fisheries in Morecambe Bay and specifically on Heysham Flat skear. The NWIFCA (and its predecessor the NW&NWSFC) has carried out Habitats Regulations Assessments for this fishery each year it was opened since 2006. The most recent HRAs are available on the NWIFCA website: <u>https://www.nw-ifca.gov.uk/marine-protected-areas/hra/</u> These contain lengthy detail about the nature of the fisheries, the ephemerality of the stock, the conservation features for which the site is designated, their conservation status, the potential risks fishing activity could pose to the features, along with detail on potential impacts, vulnerability, and features' exposure to pressures. Finally the HRAs contain detail of the management (byelaws, and specific measures for each year depending on circumstances of the skear and the stock) to ensure no risk to the integrity of the European Site.

Considering the long history of this fishery there seems little point in producing a lengthy document which repeats the information contained in previous versions. The NWIFCA has taken the approach to summarise the factors that have changed for 2018, and carry out an Appropriate Assessment on these. This is provided in concise format below.

Please refer to the HRA for this seed mussel fishery carried out for 2017 for the most up-to-date detailed information on other factors that are not covered in this document: NWIFCA-MB-EMS-SEED MUSSEL HEYSHAM FLAT-11-07-17

#### Management of Mussel Stock – NWIFCA

Certain conditions need to occur for the NWIFCA to authorise fishing of seed mussel, namely that the stock has been assessed as in imminent likelihood of being lost to the fishery through natural causes, and subsequently that a high proportion of it will not grow through to reach size (45mm); and that conditions pertain to fishing being possible without risk of damage to the cobble and boulder substrate conservation features. These include:

- settlement in high abundance and density, and;
- fast growing and high deposits of pseudofaeces (mussel mud), and;
- the mussel mud becoming very soft and loose and at risk of being washed out, taking the mussel with it;
- or dense settlement being heavily predated on by thousands of starfish.

The fishery is highly variable depending on the vagaries of the stock, and the changes in the dynamic environment of the north west coast and have to be assessed on a year by year basis.

# 1. Proposed Hand-gathered Seed Mussel Fishery 2018

The NWIFCA proposes to authorise the hand-gathering of seed mussel from Heysham Flat to NWIFCA Byelaw 3 permit holders. The maximum number of permits issued is 120. In reality from past fisheries it is known that a maximum number of around 40 permit holders will prosecute the fishery at any one time.

A limited hand-gathered cockle fishery is due to open in the Ribble Estuary around the beginning of August and therefore the number of gatherers at Heysham is likely to be far less than 40 while this fishery is open.

The date of opening is 23rd July and the authorisation will run until the end of the year.

Gathering is only permitted during daylight hours, defined as one hour before sunrise and one hour after sunset, Monday to Friday inclusive.

The authorisation is provided as Annex C.

# 2. <u>Seed mussel stock and condition and extent of Sabellaria alveolata at Heysham Flat</u>

a) Inspections of the stock have taken place on 5<sup>th</sup> January, 6<sup>th</sup> March, 3<sup>rd</sup> April, 18<sup>th</sup> May, 15<sup>th</sup> June, 16<sup>th</sup> June and 29<sup>th</sup> June 2018.

b) The inspections on 5<sup>th</sup> January and 6<sup>th</sup> March showed:

i. the main skear to consist of bare cobble along with some remaining mussel in certain areas which was hard in to the ground. There was no evidence of mud remaining from 2017 mussel mud;

ii. the honeycomb worm on the main skear was mainly gone or dead and heavily eroded. There were new worm patches around the southern edges starting just SW of Conger Rock and heading back towards shore for around 200m. There was a fairly extensive area of last year's *Sabellaria alveolata* along with newly settled worm tubes along the channel in the northern reaches of skear – ie. off the main skear where the historic *Sabellaria* reef had been. NB this skear was hardly fished in 2017 due to the concurrent opening of a very lucrative cockle

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c) on 6<sup>th</sup> March there was evidence of pinprick mussel on much of the skear mainly on the cobbles and boulders.

d) on 3<sup>rd</sup> April it was clear that there was now:

i. evidence of a settlement of mussel spat from midway down the skear to Dallam Dyke on most of the substrates. Some live mussel around 30mm was observed from the previous year's settlement in small bands towards the end of the skear;

ii. there was very little *Sabellaria alveolata* live or dead present on the main skear; the only areas were to the north of the main skear which was in good condition with little to no mussel spat present. There was some Sabellaria along the edge of Dallam Dyke on Knott End skear. Where the Sabellaria was present on the main skear there was evidence it had a covering of mussel spat.

e) On the inspection in May Natural England officers accompanied NWIFCA science officers and observed:

i. superabundant spat on all of the main skear apart from a band of bare cobble through the middle;

ii. the Sabellaria was all now gone from the main historic area beyond Conger Rock. NE agreed there was no need to protect this area this year, as had been agreed as management in 2017;

iii. there were some small areas of Sabellaria around the edges of the skear which were in poor worn condition with mussel on or very near to it, and subsequently highly likely to get smoothered;

iv. the main worm area was still in the north on shelly / sandy substrate. It extends a long way north now and as this holds live healthy colonies should be protected from fishery activities;

v. Knott End skear and the bottom end of the main skear has some size mussel on – mixed in with dense new spat settlement so expect it to get covered with growing mussel and pseudofaeces;

vi. Little Out skear and Great Out skear, although not accessible, looked black and had many birds on which suggested a similar spat settlement.

f) The heliflight on 16<sup>th</sup> June did not fly directly over the main skear but using the zoom lens on a digital SLR camera it showed a dense covering of seed mussels on Little Out Skear and Great Out Skear (see photos in Annex A).

g) A further foot inspection carried out by the Senior Scientist on 29<sup>th</sup> June confirmed that the mussel was now almost in a fishable condition in that it had grown extremely fast and was now becoming very loose in its un-embyssed state. A hand-held GPS was used to define a line across the northern area of Sabellaria. There is little risk of gatherers going to this area due to the lack of fishable mussel and it is not part of the usual access route on to the main skear. However in order to ensure these worm colonies are protected the NWIFCA will impose and enforce an exclusion zone to access to prevent trampling, and to fishing should any mussel move into this area during the opening period of the fishery (see photos in Annex B and mapping in Annex C).

h) No formal assessment of biomass has been carried out as from many previous years of assessments on the main skear, it can be estimated that there is around 6500 tonnes, with thousands more on the other outer skears.

# 3. Assessment of cockle and mussel stocks in the Bay as a whole

The NWIFCA monitors cockle and mussel beds in Morecambe Bay regularly from early in the year and keeps an on-going record (with information from all sources) of the state of the stocks.

# a) Latest Information on Mussel Stocks:

The majority of the mussel beds in Morecambe Bay currently hold an abundant stock of mussels, which are mainly small but with some larger mussel persisting from 2017. It is rare for the Bay's mussels to reach greater than around 47mm.

# Fleetwood beds – inspected on foot 18/05/18 and by air on 16/06/18

i. Perch Scar – superabundant seed mussel of around 90% coverage. Area estimated at 9.3 ha. This skear may be authorised as a dredge fishery this year.

ii. Black Scar has had a 2018 spat settlement which varies in density between 40-60% coverage. The spat is small 2-4mm and has settled on the hard substrate. Along the channel edge there is a band of 20-30mm mussel. Approx. size of area with mussel on it = 1.3 ha. Will not be fished.

iii. King Scar - mussel is patchy and mixed. There are areas with 60-80% coverage of 2018 spat, areas where the spat is mixed in with 20-40mm mussel, areas of *Sabellaria* alveolata and areas of bare substrate. Moving off of the scar there is an area of large barnacled mussel attached to an old wooden structure as seen in previous years. Approx. size of area with mussel on it 4.3 ha. Will not be fished.

iv. Neckings and Rossall Scar are hard to define as the low water line is dominated by the presence of *Sabellaria alveolata* which is found in patches, some have mussel settled on them, others do not.

<u>Wyre End</u> inspected by air on 16/06/18 – abundant spat – bare cobble area in the middle but small mussel consistently across other areas. Small skear south of this covered in spat also. Good bird resource if other fisheries authorised. Will not be fished.

#### North Morecambe Bay (foot inspections 05/03/18, 19/04/18, and helflight 16/06/18)

i. Low Bottom up to Foulney Ditch – had a good spat settlement in the spring but is now badly covered in weed (Enteromorpha), which may smother it or help to keep it moist in the hot weather. Foulney Ditch is clearer but the (larger) mussel there appears to be sporadic.

ii. Foulney – in March the area to the south of the main skear towards Low Bottom had bands of live mussel approximately 20-30mm in shell length at an estimated coverage of 30%. On the main skear, the cover of mussels varied across the bed with a mix of live mussel with dead shell, with the highest live coverage reaching 50%. The size of the live mussel ranged from 30-45mm across the bed, with very few size mussels sighted. The mussels were predominantly clean with very little fouling from encrusting organisms. The very end of the skear had no mussel present. The area towards Walney Channel near the green marker buoys consisted of clean mussel just under size (35-40mm) which is on mud.

The heliflight revealed that the small island off to east of Foulney is covered in spat; there is mussel under the water on way out to Falklands; Foulney Island has a superabundant covering of mussel seed; and the mussel near the green buoy in the Walney Channel has a covering of Enteromorpha.

iii. Falklands – has a mix of sizes of mussel with a significant stock remaining from 2017 cohort which has almost reached size, and a new 2018 settlement. The larger mussel appears to be along the southern edge of the skear. The rest of the largest skear has a mix of spat, seed and part-grown mussel. The smaller bed at Falklands seems dominated by seed which looks loose and around 10mm with sand in between. No dense layer of mussel mud is visible at present. There is another small mussel bed heading towards Walney Island with good mussel on with more underwater further towards Walney.

The Falklands area may be authorised to fish but in June it was not a fishable amount yet and was patchy with cobbles between. To be monitored to see how it progresses.

iv. South America. No fishing occurred on this area in 2017 and some of the mussel which had not put down thick loose mud had persisted into spring 2018. Once signs of a new settlement appeared, hand-gatherers requested authorisation for a limited fishery to remove the 2017

mussel prior to it being inundated with the new spat. A limited fishery was authorised for one week of tides in May with the harvested mussel sent for relaying in aquaculture lays.

On 17/05/18 a foot inspection revealed that main skear had been fished down as expected. The surrounding areas had 2018 spat on (underwater) and there were some new colonies of *Sabellaria alveolata* appearing, but these were covered in mussel spat so anticipated to become smothered.

The South America area may be authorised to fish and it will be monitored to see how it progresses.

#### b) Latest Information on Cockle Stocks. All beds closed May – August:

There was no significant cockle settlement in 2017 in Morecambe Bay and as yet no sign of 2018 settlement. Cockles of varying sizes remain in low densities across most beds.

Pilling Sands – surveyed 21/03/18 Cockle bed area = 1154 ha

Mean number of size cockle:	25 per m² (min. 0, max 180)
Mean number of undersize cockle:	~ 19 per m <sup>2</sup> (min 0, max 234)

Middleton Sands – not yet surveyed.

Warton Sands – surveyed 22/03/18 – no significant stock.

<u>Flookburgh</u> / <u>Leven</u> <u>Sands</u> – surveyed – 21/02/18. It was clear that there is still a concentration of cockle where the permit holders were last working. The cockles appear to be in a small band where they are highly concentrated ( $200m^2$  plus). Average size 15 per m<sup>2</sup> (min. 0, max 104) average undersize 16 per m<sup>2</sup> (min 0, max 92) over the whole bed with 39 stations sampled.

<u>Newbiggin</u> – 17/04/18. Bed area = 295.2ha.

31 stations. Size cockle was located throughout the bed, excluding 5 stations with no presence of sized cockle, with 16 stations containing cockles in the size category of >35mm.

Mean number of size cockle	23 per m <sup>2</sup> (min. 0, max 60)
Mean number of undersize cockle:	13 per m <sup>2</sup> (min 0, max 42)

#### Conclusion:

There is limited cockle in the Bay at present, with abundant supplies of seed mussel and some larger mussel remaining from 2017. There are large areas holding dense mussel which will not be disturbed by any fishing activity, including Black Scar, Kings Scar, Wyre End and its neighbouring smaller scar, Little Out Skear and Great Out Skear at Heysham, and the beds in north Morecambe Bay. The only area currently being fished by one or two gatherers at a time is the edge of Foulney near the green buoys on the biggest spring tides.

There is consequently no risk of adverse effect to SPA bird species that rely on mussels as a food resource, or to other species feeding in these areas.

#### 4. rMCZ –Wyre / Lune

In June 2018 Defra announced a formal consultation on the Tranche 3 MCZ (Marine Conservation Zones) designations. One T3 site – Wyre Lune rMCZ lies within Morecambe Bay and is proposed for designation for the protection of smelt, which will have a recover General Management Approach. The Wyre discharges at Fleetwood / Knott End, and the Lune discharges between the Pilling and Middleton Sands cockle beds.

The seed mussel fishery lies north of the Lune Estuary with a distance of around 10km and in theory smelt could swim in the area of the skear when the tide covers it, and fish have been known to become entrained in the screens at the Heysham nuclear power station situated just south of the skear.

However there is no interaction between smelt and the hand-gathered intertidal fishery and therefore the rMCZ has been screened out of the assessment at this stage.

# 5. Biosecurity

Morecambe Bay is currently shellfish disease free and the Authority considers it a priority to maintain this status. The invasive non-native species (INNS) Chinese Mitten Crab (*Eriocheir sinensis*), Japweed (*Sargassum muticum*) and Leathery Sea-squirt (*Styela clava*) have previously been recorded within the Morecambe Bay EMS. In order to implement effective measures to prevent the introduction and / or spread of diseases or INNS 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).

In addition due to recent findings of Chinese Mitten Crab in the Walney Channel an Advice Notice has been produced for gatherers and buyers, and a Code of Practice for Seed Mussel has been distributed and published on our website. Fisheries regulators in areas where seed is known to be likely to be transported have also been notified.

The NWIFCA science team will monitor this fishery for any INNS.

# 6. Appropriate Assessment

The scope of the appropriate assessment was the following:

• Vehicular, trampling and fishing damage to:

- Sabellaria alveolata reefs

- Vehicular/human disturbance to birds
- Physical removal of seed mussel

Appropriate Assessment Summary Table

Feature/Sub feature(s)	Conservation Objective	Potential pressure (such as abrasion, disturbance) exerted by gear type(s)	Potential ecological impacts of pressure exerted by the activity/activities on the feature (reference to conservation objectives)	Level of exposure of feature to pressure	Mitigation measures
Intertidal biogenic reef: including mussel and Sabellaria alveolata communities (Reefs)	Maintain or restore the extent, distribution structure or function of the feature.	Abrasion/disturbance of the substrate on the surface of the seabed	Abrasion/disturbance of the Sabellaria alveolata reef feature could damage the reef building capacity on the skear	As detailed in 7.1.1 NWIFCA-MB- EMS-SEED MUSSEL HEYSHAM FLAT-11-07-17	The live areas of <i>Sabellaria</i> <i>alveolata</i> will be protected via an exclusion zone to the fishery within the authorisation to fish seed mussel.
		Litter	Litter could pose potential threat to wildlife, especially birds through ingestion or entanglement;	As detailed in 7.1.2 NWIFCA-MB- EMS-SEED MUSSEL HEYSHAM FLAT-11-07-17	Code of Conduct includes responsibility for littering. NWIFCA officers will work with gatherers, buyers and local authority to ensure littering does not affect the conservation features. NWIFCA keeps a swift response to any alerts to littering issues.
Intertidal biogenic reef: including mussel and Sabellaria alveolata communities (Reefs)	Maintain or restore the extent, distribution structure or function of the feature.	Removal of target species	Removal of target species could change the invertebrate community composition of the skear.	Target species is classed as ephemeral and likely to wash out by autumn and therefore no likelihood of change to community composition occurring than through natural events. It is therefore unlikely to have a significant effect on the extent, distribution, structure or function of the features. As detailed in 7.1.3 NWIFCA-MB- EMS-SEED MUSSEL HEYSHAM FLAT-11-07-17	NWIFCA Byelaw 3 that permits hand-gathering of mussel has reduced number of permits to maximum of 120. In reality the highest number of gatherers at any point will be around 40 persons. Previous fishery landings returns have shown that only a fraction of the seed mussel on the Heysham skears is removed by the fishery - expected maximum 700 tonnes from 2014, 2015 and 2016 returns, 503, 684 and 268 respectively)

Common eider, Eurasian oystercatcher, Red knot, Herring gull	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 (mussels)	Removal of food source / prey items has the potential to affect condition, productivity and survival of species, as detailed in As detailed in 6.2.3 NWIFCA- MB-EMS-SEED MUSSEL HEYSHAM FLAT-11-07-17	The level of exposure depends on time of year of fishery, availability of alternative food resources, stock status and level of effort. There are large areas of mussel ground within the Bay that hold a further resource of both size and undersize mussel which knot and oystercatcher may utilise. Target species is classed as ephemeral and likely to wash out by autumn and therefore no likelihood of change to bird food resource occurring than through natural events. As detailed in 7.1.1 NWIFCA-MB- EMS-SEED MUSSEL HEYSHAM FLAT-11-07-17	NWIFCA Byelaw 3 that permits hand-gathering of mussel has reduced number of permits to maximum of 120. In reality the highest number of gatherers at any point will be around 40 persons. Previous fishery landings returns have shown that only a fraction of the seed mussel on the Heysham skears is removed by the fishery - expected maximum 700 tonnes from 2014, 2015 and 2016 returns, 503, 684 and 268 respectively)
Common eider, Eurasian oystercatcher, Red knot, Herring gull	Maintain or restore the population of each of the qualifying features, and, the distribution of the qualifying features within the site	Visual disturbance	Visual disturbance could impact on condition of birds feeding or loafing in the area, by causing unnecessary energy expenditure if flushed and taking to flight. For birds feeding near the affected areas it could also reduce feeding times, and increase competition if birds are forced to concentrate into reduced feeding areas. 6.2.3 NWIFCA-MB-EMS-SEED MUSSEL HEYSHAM FLAT-11-07-17	Footprint of activity is limited and impact likely to be minimal. Alternative feeding areas available. As detailed in 7.2.2 NWIFCA-MB- EMS-SEED MUSSEL HEYSHAM FLAT-11-07-17	Knott End skear, Little Out skear and Great Out skear have abundant stocks of seed mussel and are unlikely to be accessed by fishermen. They uncover on similar tidal height to Heysham Flat skear and will provide an undisturbed area for SPA bird feeding. Fishing times are restricted to daylight hours only Monday – Friday.
Birds frequenting the intertidal area: little egret, ringed plover, European golden plover, Grey plover, Lapwing, Sanderling, Dunlin, Black-tailed godwit, Bar-tailed godwit, Eurasian curlew, Common redshank, Ruddy turnstone, Common shelduck, Wigeon, Northern pintail, Gulls	Maintain or restore the population of each of the qualifying features, and, the distribution of the qualifying features within the site	Visual disturbance	Visual disturbance could impact on condition of birds feeding or loafing in the area, by causing unnecessary energy expenditure if flushed and taking to flight. For birds feeding near the affected areas it could also reduce feeding times, and increase competition if birds are forced to concentrate into reduced feeding areas. 6.2.3 NWIFCA-MB-EMS-SEED MUSSEL HEYSHAM FLAT-11-07-17	Footprint of activity is limited and impact likely to be minimal. Alternative feeding areas available. As detailed in 7.2.2 NWIFCA-MB- EMS-SEED MUSSEL HEYSHAM FLAT-11-07-17	Knott End skear, Little Out skear and Great Out skear have abundant stocks of seed mussel and are unlikely to be accessed by fishermen. They uncover on similar tidal height to Heysham Flat skear and will provide an undisturbed area for SPA bird feeding. Fishing times are restricted to daylight hours only Monday – Friday.

# 7. Conclusion

The natural condition of the stock being ephemeral, the availability of abundant mussel on the outer skears and around the Bay, plus the management and mitigation measures incorporated into this fishery, and the use of an effective enforcement team of NWIFCA Officers allows the NWIFCA to conclude that the seed mussel hand-gathered fishery at Heysham Flat, Morecambe Bay during July to December will have no adverse effect on the integrity of the European Site.

# 8. In Combination Assessment

# i. Cockle Fisheries

All cockle beds are closed under NWIFCA Byelaw 3 until the 1<sup>st</sup> September 2018. Any cockle fishery will undergo a full HRA and will consider this fishery in the in-combination assessment before any fishery can go ahead taking into consideration bird food requirements and visual disturbance.

# ii. Size Mussel Fisheries

Size mussel fisheries are in effect open for hand-gathering by Byelaw 3 permit holders. There is potential for two areas within north Morecambe Bay to be fished for size mussel. They are Walney Channel side of Foulney and South America / Falklands. Both of the fisheries are limited by the tide and can only be fished on spring tides with the South America / Falklands beds being restricted further and only being able to be fished on average for 10 tide / 5 days per month if weather conditions are correct. The number of Byelaw 3 permit holders fishing these areas will be a combined maximum of 10 people, and on a tide a gatherer will typically remove between 500-1000kg of mussel.

# iii. Pressures and features assessed within the in combination assessment

# Size mussel fishery - removal of target species (mussel) for oystercatcher, knot, common eider, herring gull

NWIFCA considers the in-combination effects of removal of target species (mussel) will have no risk of adverse effect on the integrity or conservation status of the site due to the following reasons:-

- the fishery is only authorised due to the target species being classed as ephemeral and likely to wash out by autumn and therefore no likelihood of change to bird food resource occurring than through natural events;
- removal from size mussel fishery is minimal compared overall mussel biomass;
- fishing of undersize mussel has the potential to increase biomass by thinning the mussel out and making it more stable;
- large areas of Morecambe Bay hold areas of unfished mussels that contain mixed size classes and are uncovered on most tides;
- both fisheries will be prosecuted by some of the same permit holders and therefore when one fishery is being fished it is likely to decrease the removal from the other fishery;
- both fisheries are restricted by tides leaving unfished tides;
- both fisheries have areas that will remain unfished and can be utilised by the birds;
- eiders feed in the subtidal areas, fishing only occurs when the mussel beds are uncovered in intertidal areas;
- there are alternative bird food resources of cockles on most of the cockle beds within the site, although this stock is limited. These beds are currently closed to fishing and unlikely to open at the end of the closed season on 1<sup>st</sup> September.

# Size mussel fishery – Visual Disturbance for all SPA features

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 due to the following reasons:

- low level of effort on size mussel fisheries and all fishing effort on the seed mussel fishery will be concentrated in a small area;
- large areas of Morecambe Bay hold areas of unfished mussels that contain mixed size classes and are available on most size tides;
- both fisheries are restricted by tides leaving unfished tides where there is no fishing disturbance;
- both fisheries have areas that will remain unfished and can be utilised by the birds;
- disturbance to none intertidal species, wildfowl, divers and terns unlikely and any disturbance will be minimal;
- many of the designated species are overwintering birds with the population size within the site increasing in the colder months, the fishing usually decreases and ceases as the mussel is typically lost in the autumn weather;
- many of the wader species utilise the areas not being fished; dunlin, black tailed godwit, bar tailed godwits, curlew
  and redshank mainly target mudflats as their feeding grounds. Oystercatcher, ringed plover, grey plover, knot,
  sanderling and turnstone feed on a variety of substrates in the intertidal area as well as the fished areas. Golden
  plover are only likely to feed in the intertidal areas in cold weather conditions.

# 9. Cold Weather Conditions

NWIFCA has a policy of reviewing any intertidal open cockle and mussel fishery during prolonged periods of cold weather to ensure bird feeding and roosting is not detrimentally disturbed. The NWIFCA Technical Science and Byelaws Sub-Committee (TSB) approved the following on 6<sup>th</sup> February 2018:

"In future during winter fisheries, if cold weather is predicted to be below zero for more than 12 hours a day for 5 consecutive days then an assessment of the risk to SPA features would be completed taking into account the fishing activity, and a decision made on whether to close any individual fisheries."

Annex A to Heysham Flat seed mussel fishery HRA 2018



Heysham skears from heliflight on 16<sup>th</sup> June 2018 showing extent of mussel on and around

outer skears





Heysham Flat from foot inspection on 29<sup>th</sup> June 2018 showing extent

and condition of seed mussel on main skear





North off of main skear holds healthy Sabellaria alveolata

and will be protected from fishing activities. (18th May 2018)





North off of main skear holds healthy *Sabellaria alveolata* and will be protected from fishing activities. (15<sup>th</sup> June 2018)



# AUTHORISATION TO FISH UNDERSIZED MUSSELS FROM



HEYSHAM FLAT SKEAR 2018

All Current NWIFCA Byelaw 3 Permit Holders

5<sup>th</sup> July 2018

With effect from: 23/07/2018 Expiry Date: 31/12/2018

All current Byelaw 3 permit holders are hereby authorised, under Byelaw 3, paragraph 6 (Minimum Sizes) to fish undersized mussels from Heysham Flat, **excluding the area as defined in paragraph 2**, 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 23/07/2018 to 31/12/2018, excluding Bank Holiday Monday 27th August 2018.
- (b) That the mussels shall only be gathered by hand or with a rake.
- (c) That fishing shall take place only from Monday to Friday inclusive, during daylight hours, defined as one hour before sunrise and one hour after sunset.
- (d) The NWIFCA will close the fishery during periods of prolonged cold weather.
- (e) The authorisation is only valid for current Byelaw 3 permit holders. It does not allow any other person to take or remove undersized mussels.
- (f) 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.
- (g) Any fishing taking place under this authorisation shall be carried out in accordance with the Authority's Code of Conduct for Intertidal Shellfisheries.
- (h) Fishing and transit by ATVs (quad bikes) or tractors in the excluded area as defined in paragraph 2 is prohibited.

# 2. Definition of Excluded Area

Part of that area within Morecambe Bay known as Heysham Flat Skear as illustrated on the map attached at Annex A, north / northwest of the line defined by the following co-ordinates:

Point	Latitude (d.d)	Longitude (d.d)	Latitude (d m.m)	Longitude (d m.m)		
Α	54.06064	-2.91709	54° 3.638" N	2° 55.025" W		
В	54.05818	-2.91247	54° 3.490" N	2° 54.748" W		
C	54.06432	-2.89977	54° 3.859" N	2° 53.986" W		

He	sham	Flat I	Mussel	Fisherv	Exclusion	Line
ILE	Silaili	ria.	VIUSSEI	ristiery	LACIUSION	LIIIE

# 3. Advisory Notes

- (a) When fishing, or when operating vehicles in the vicinity of Heysham Flat Skear, take care to avoid live colonies of the Honeycomb Worm. These are a protected species, and damaging them could lead to a fine of up to £20,000, revoking of authorisations and **closure of the fishery**.
- (b) 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. Should there be concerns that losses of mussel around Morecambe Bay is occurring which will impact on the available bird feeding resource, the NWIFCA will withdraw authorisations and close the fishery.
- (c) Avoid driving vehicles over the seed mussels as far as possible. Using a single access route will avoid unnecessary damage to the mussel stock.

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 - Heysham Flat Seed Mussel Exclusion Area 2018 - In order to protect Sabellaria alveolata on the fringes of the skear, all fishing activity including access is prohibited north / northwest of line A – C



# Annex B – Natural England's Advice

Advice received via email on the 17<sup>th</sup> July 2018 from Dr Katherine Nisbet, Marine Senior Advisor in the Cumbria Area Team.

Summary of email content:

- I have reviewed the HRA and overall I am content with the assessment and its conclusions.
- I agree that this summarised approach is much more efficient and avoids duplication. It's also much easier to highlight the key changes and issues.

**Query**: if there is any significant change in numbers of permit holders accessing the fishery, would this be monitored by NWIFCA to ensure no change in assessed impacts? I know this is unlikely given the fishery type and preference for cockles by most permit holders, but I'd just like to check.

Summary of NWIFCA response to query on 17<sup>th</sup> July 2018:

Inshore Fisheries and Conservation Officers (IFCO) are present on most tides and record who is fishing and there is a requirement to report monthly landings in Byelaw 3, therefore we would be aware if there was any significant change in the number fishing.