

## **MANAGEMENT OF UNREGULATED HAND-GATHERING OF BIVALVES AT LEASOWE BEACH, WIRRAL**

**Purpose:** To provide a detailed report to members on the issue of clam gathering at Leasowe

**Recommendation:**

- i. to implement a permanent byelaw that prohibits the removal of any bivalves from the beach at Leasowe unless under a permit issued under NWIFCA Byelaw 3 or NWIFCA Restrictions on the use of a dredge byelaw 2017;
- ii. that scientific survey should continue over the next three years to provide data on population recovery in order to inform the byelaw review after 3 years.

### **Situation 2013 - 2020**

1. NWIFCA has been monitoring activity levels of hand-gathering of unregulated bivalves on the North Wirral Foreshore since 2013. Significant numbers of gatherers from a variety of ethnic backgrounds, identified as appearing to be mainly Far East / South East Asian (IC5\*), had been observed by enforcement officers on the larger spring tides. There were fears that gathering could be commercial and might be causing problems to the sustainability of the stocks.
2. As regularly reported to the Authority, increased effort in patrolling the area and recording sightings showed that the activity only occurred during the largest spring tides in the summer, (see Table 1) and that it was being carried out by family groups gathering clams for personal consumption. This was corroborated through liaison with Environmental Health Officers and other enforcement agencies, through sharing of intelligence and joint-working, and no evidence was found to suggest the catch was being sold.
3. The North Wirral Foreshore is an interesting beach, possibly the most biodiverse in the NWIFCA District. A small number of artisanal fishers of IC5 origin collect razor clams (*Ensis spp*) by hand along the extreme low water level, and also net by hand for flat fish in the shallows. Razor clams only appear to uncover on the largest spring tides, a fact supported by the 2020 research project on Liverpool Bay razor clam stocks carried out by NWIFCA and Liverpool University. They are therefore only available for gathering on a handful of tides each year.
4. IFCOs enforce minimum sizes for *Ensis* and fish caught, as regulated in NWSFC Byelaw 19. They also enforce cockle regulations under NWIFCA Byelaw 3: this area is not currently classed as a 'commercial area' under this byelaw and therefore when the cockle beds are not closed under seasonal closure or other managing byelaw it is legitimate for members of the public to remove up to 5kg of size cockle per person per day.
5. In 2014 NWIFCA scientists recorded gatherers removing large clams (either otter clams and / or sand gapers) and in 2015 enforcement officers were issued with identification guides for different clam species and their relevant minimum sizes. These have been enforced whenever possible. However otter clams (*Lutraria lutraria*) and sand gaper (*Mya arenaria*) do not have any size limit. They are quite similar in shape, size and colour to the untrained eye. In the last two years they appear to have been situated quite high on the beach, and therefore accessible on most tides.

Table 1: IFCO sightings data of hand-gathering of bivalves on Leasowe foreshore by month 2014 - August 2020. Numbers indicate total number of gatherers recorded per month. Colours indicate: green 1 - 20; amber 21 - 50; pink 51 - 100; red >100.

IFCO Sightings reports for all bivalve gathering May 2014 - June 2020, excluding cockles												
Total for Month	JAN	FEB	MARCH	APRIL	MAY	JUNE	JULY	AUGUST	SEPT	OCT	NOV	DEC
2014	0	0	0	0	0	53	42	100	23	0	0	0
2015	0	0	0	124	1	0	0	0	40	6	0	0
2016	0	0	0	0	55	0	0	4	27	0	0	0
2017	0	0	9	25	0	29	26	0	0	0	0	0
2018	0	2	0	0	5	2	0	0	1	0	0	0
2019	0	0	2	2	7	1	33	46	58	5	3	0
2020	0	0	0	0	69	505	0	0	0	0	0	0
2019 - Summer patrol effort focused on cockle fishery open at Marshside												
May and June 2020 - recreational gatherers were targeting all bivalves including cockles												
Emergency byelaw introduced on 3rd June 2020												
Key												
1 - 20												
21 - 50												
51 - 100												
>100												
not available												

### **Situation 2020 following Coronavirus Lock Down**

6. Throughout the coronavirus lock down, starting on 23<sup>rd</sup> March 2020, IFCOs maintained an enforcement presence on the North Wirral Foreshore. The Leasowe cockle fishery was still open up until the end of April and being prosecuted by low numbers of permit holders. During the height of lock-down there was no public gathering as people were not allowed to move around except for essential travel.
7. Once these strict lock-down measures were relaxed by government and people were allowed to fish recreationally again, there was an influx of large numbers of people gathering on this beach every day. NWIFCA Head of Enforcement reported to the Authority enforcement statistics on sightings (Table 1) and amounts of clams being removed from the beach and the risk this was causing, along with the high level of contacts from members of the public concerned about the high numbers of people gathering on the beach. NWIFCA took decisive action of introducing an Emergency Byelaw to prohibit any gathering of bivalves in June 2020, and increasing enforcement capacity.

### **Future Management**

8. The Marine and Coastal Access Act 2009 (MACAA) gave IFCA's powers to implement emergency byelaws, which are signed off by the Secretary of State for a period of 12 months, with a provision for a 6 month extension in extenuating circumstances. NWIFCA urgently needs to plan what the next steps are.

It is important to consider that it is possible that the increase in activity was driven by the coronavirus pandemic situation:

- need for people to only socialise in outdoor spaces
- inability for people to work and earn wages and so foraging for food more likely
- more time on peoples' hands

- extremely good weather

and may not be repeated in future years. However, there is also a real risk that knowledge of clams in this area has now become more widespread and that it will continue to get targeted by large numbers and over most tides.

### **Threats to Biodiversity and Target Species from Unregulated Fishing Pressures**

- From observations while carrying out cockle and razor clam surveys on this beach, one gets the impression that this intertidal area is one of the most biodiverse in the District. Analysis of records in the National Biodiversity Network Atlas (NBN) database for Leasowe (5km radius from point on shoreline encompassing all of the shoreline from New Brighton to Hoylake)<sup>2</sup> provides an illustration of how species rich the beach here is. Their records show reported finds of:
  - 16 species of fish - including herring, cod, whiting, flounder, sole and plaice
  - 32 species of marine worms - including blow lugs and black lug collected for angling bait
  - 29 species of marine gastropod - including various sea slugs, sea snails, dog whelks and periwinkles
  - 30 species of arthropods - including crabs, barnacles and various sand dwelling arthropods
  - 6 species of cnidarian (anemones and jellyfish) - including beadlet anemone
  - 5 species of echinoderm - including heart urchins (sea potato), and burying brittlestars
  - 21 species of marine bivalves - including cockles, razor clams, otter clams but also many other smaller clams such as tellins, macoma, striped venus.
- Many of the NBN records are historic and some of these species may no longer be present. However NWIFCA officers found thirteen invertebrate species during survey, an indication of the species richness.
- The benefits of healthy biodiversity cannot necessarily be readily quantified in terms of the ecosystem services provided, particularly in relation to complex food webs and interactions between burying invertebrates and trophic levels. There is ample evidence of the importance of this beach, situated close to the heavily industrialised and modified water courses of the Mersey Estuary and City of Liverpool, and the role it plays in supporting a variety of birds and fish, whose position at higher trophic levels are key indicators of the health of the system, through its numerous nature conservation designations.
- The beach at Leasowe is designated as a Special Area of Conservation (SAC) under EU legislation for its intertidal sediments. The whole of the North Wirral Foreshore is designated to protect wading birds and waterfowl, as a Special Protection Area (SPA) under European legislation, and a Site of Special Scientific Interest (SSSI) under UK legislation. The SPA protects nine internationally important species of bird including sanderling, oystercatcher, little gull, bar-tailed godwit, cormorant, grey plover, common tern, redshank and dunlin. The SSSI supports nationally important populations of knot, bar-tailed godwit and dunlin.
- Cormorant and common tern are fish feeding birds, with their fish prey likely to utilise the intertidal sediment communities for feeding. The waders heavily utilise the beach for food resource and a further protected species, turnstone, also utilises the beach area for foraging.
- Observations and enforcement patrols and sightings of unregulated gathering occurring in early summer showed that although cockles, otter clams and sand gapers were key target species for these gatherers, in true foraging fashion almost any clam and gastropod found will be taken. Gatherers have been recorded intensely searching the sea defence structures at the top of the beach for periwinkles and dog whelks. Surf clams and tellins have been observed in gatherers' buckets mixed in with the other catches.

15. This has serious implications for fisheries management. When one target species is identified, with a known amount of interest (number of gatherers / vessels / types of fishing gear etc) an assessment of stock status, investigation into its importance to protected features when situated within a protected area, assessment of the impact of fishing activity in terms of removal of that organism from the system and the fishing activity itself (on sediments, bird disturbance etc) can be made, and management parameters identified and set. NWIFCA is familiar with this through the Habitats Regulations Assessment (HRA) process for each of its cockle and mussel fisheries. It is comfortable with this approach and in setting limits such as Total Allowable Catches (TAC) on fisheries.
16. Decision making on how to sustainably manage such activities becomes extremely problematic when faced with:
  - an unknown number of gatherers
  - gatherers not identifiable through a permit scheme
  - an unlimited number of target species
  - no set methods of gathering
  - no robust data on target species population dynamics and distribution
  - majority of target species buried in sediment over a vast intertidal area.
17. It is clear that intertidal gathering cannot remain unregulated; the risks of damage shown by recent events are too great. There appear to be two options for NWIFCA to consider:
  - i. to maintain a permanent closure on all intertidal gathering (except cockle gathering permitted under NWIFCA byelaw 3);
  - ii. to regulate a sustainable fishery with set parameters.

i. Maintain a permanent closure:

NWIFCA is aware of and upholds the Public Right to Fish. To close this area totally to all but commercial gathering of cockles could be considered heavy-handed and over-zealous. There is also legitimate collection of bait worms. Some bait collectors will also take razor clams.

However, the on-going study into razor clam populations in the Liverpool Bay SPA (held up by coronavirus) indicates that razor clams found along the low tide level (only on large spring tides) form the edge of a larger sub-tidal population. Consequently there is little concern over the removal of razor clams which are only accessible on a few tides each year. Discussion with IFCOs confirm they do not consider this a significant issue to bait collectors.

ii. Regulate a sustainable fishery:

In order to regulate a fishery, a 'reasonable' level of fishing needs to be identified that would allow fishing to continue that is both sustainable for both the target species (plural), the ecosystem in which they are found and to which they contribute, and to be Habitats Regulations compliant. The first step to this is to ascertain population dynamics of species and stock levels.

Need for Data to Inform Management

18. NWIFCA science team have worked stringently to provide evidence to the Authority to inform future management decisions. A methodology has been developed and refined through an iterative process to provide a practical means of assessing population dynamics and distribution of the targeted large clams. A full survey report is provided at Annex A. All work detailed must

be considered in the context of it having been carried out following a period of intensive removal of clams by gathering over summer 2020.

### **Recommendations for Management**

19. The surveys have revealed that since the spring the population of large clams has reduced to almost zero with none detected on two targeted surveys. It can be assumed that some of the stock may have perished through natural causes as would be expected. It can also be assumed that the population was significantly reduced by the gathering that occurred.
20. The lack of stock results in an impossibility to regulate a sustainable fishery. There is no stock on which to gather data to assess sustainable levels of fishing. This option must now be ruled out until such time as populations return and can be quantified.
21. In accordance with EU environmental regulations a precautionary approach should now be adopted when risk has been identified but cannot be quantified in order to ensure no risk to protected features.
22. All officers agree that the recommendation to the Authority should be:
  - i. to implement a permanent byelaw that prohibits the removal of any bivalves from the beach at Leasowe unless under a permit under NWIFCA Byelaw 3 or NWIFCA Restrictions on the use of a dredge byelaw 2017;
  - ii. that scientific survey should continue over the next three years to provide data on population recovery in order to inform the byelaw review after 3 years.
23. By approving this recommendation the Authority could swiftly proceed to making a full byelaw replicating the wording in the Emergency Byelaw.

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**21<sup>st</sup> October 2020 amended 19<sup>th</sup> November 2020**

<sup>1</sup> This ethnic group is classed under the ethnic appearance codes used by the police and other enforcement agencies including NWIFCA as IC5, a term that will be used in this report for simplicity. At this stage it has never been tested or evidenced as to the actual ethnic background of any of the gatherers.

<sup>2</sup> [https://records.nbnatlas.org/explore/your-area#53.416838|-3.107322|12|ALL\\_SPECIES](https://records.nbnatlas.org/explore/your-area#53.416838|-3.107322|12|ALL_SPECIES)