

Kent & Essex Inshore Fisheries and Conservation Authority

MINUTES of a meeting of the Authority held in the Council Chamber, Chelmsford Borough Council, Duke Street, Chelmsford, Essex on Tuesday 26 November 2024.

Present: Mr J Lamb (MMO), Mr J Nichols (MMO), Mr J Rowley (MMO), Mr E Hannam (MMO), Mr P Wexham (MMO), Ms T Ferry (MMO), Cllr D Crow-Brown (KCC), Cllr T Hills (KCC), Mr W East (MMO), Mr C Collins (MMO), Mrs E Gilson (MMO), Cllr M Skeels (ECC), Mr A Baker (NE)

Apologies: Cllr S Curry (Medway Council), Cllr G Coxshall (Thurrock Council), Cllr L Hyde (Southend CC), Cllr A Goggin (ECC), Cllr J Fleming (ECC), Mr R Turner (MMO)

In Attendance: Mr J Cook (Clerk, KCC), Ms S Martin (Financial Advisor, KCC), Dr W Wright (Chief Fishery Officer), Mr D Bailey (Assistant Chief IFC Officer), Dr P Haupt (Lead Science IFC Officer), Miss K Stuart (Science IFC Officer), Mrs K Woods (Admin Assistant), Miss G Welsh (Cockle Officer), Mrs D O'Shea (Office Manager)

The Chairman informed Members of the death of the former Chairman of the Sea Fisheries Committee, Mr Ken Green MBE. A minute's silence was held.

26. DECLARATION OF MEMBERS' INTERESTS (A1)

The Chairman requested Members to declare any interests and advised that those with disclosable Pecuniary Interests and Other Significant Interests may not vote on that Agenda item. The Chairman reminded Members that they could declare an interest either at this time or prior to the agenda item being discussed.

Mrs Gilson declared a personal interest in agenda item B2.

Mr Collins declared a personal interest in matters relating to recreational angling.

27. MINUTES

Mr Hannam noted that his comment regarding GDPR issues relating to the AIFCA skills audit had not been included (minute point 22). Members agreed that the minutes of the meetings held on 17 September 2024 were correctly recorded, aside from the one amendment, and that they be signed by the Chairman. No matters were arising.

28. REVENUE BUDGET MONITORING (B1)

The Financial Advisor to the IFCA provided Members with details of the estimated financial outturn for the Authority as of 31 October 2024. An underspend of £26,114 was currently forecast, although this was subject to change as the year progressed.

Members were informed that Tamesis required engine repairs which would result in an overspend of approximately £1,100 from the maintenance and repair budget for the vessels. As a result of the manila clam trials, Nerissa had been at sea more than anticipated and was now expected to use 16,000 litres more fuel than had been forecast. It was expected that the fuel budget for all vessels would now be overspent by just under £7,000.

Income from cockle permits and from the Coastal Health Project Work, which had not been anticipated when the original budget was set, totalled £58,230. This income was the main contributor to the current underspend position.

Members were advised that the grant from DEFRA of £300,000 toward the new RIB had been received. Any payments due in excess of this for the build, which was anticipated as £47,000, would come from renewal reserves.

The IFCA was waiting delivery on two new vehicles. Payment for these would be taken from reserves and would not impact the budget.

Members were provided with details of all reserves held by the IFCA

Members **APPROVED** the forecast underspend of £26,114

10.15 Ms Ferry joined the meeting

29. COCKLE FISHERIES UPDATE (B2)

TECFO 1994

The ACIFCO informed Members that the TECFO 94 fishery had opened on 16 June 2024 and closed on 27 September 2024. The TAC of 4,620 tonnes set at the May 2024 meeting had remained unchanged with each licence holder allowed 30 trips during the fishery. Most boats had made complete trips.

Yields were lower than the previous year but remained fairly stable with an average of 12% across the fishery. Trips were altered to take into account yield fluctuations.

The Autumn stock survey had taken place in September 2024. The adult stock was slightly lower compared to previous years, however was still considered to be stable. Spat was not as high as the previous year but was still considered to be good. As always winter would have an impact, and Members would be updated in May 2025 following the Spring surveys.

In respect of the fishery from 2025, Members were reminded that this would be the first year of the TECFO 24 fishery and that they had agreed to issue an additional licence. The 2024 surveys indicated that a good proportion of adult cockles currently under 16mm

would reach a commercially viable size in 2025. Feedback from Industry also suggested that cockles too small to harvest on the Maplin Sands in 2024 should be sizeable in 2025. The IFCA had appointed a cockle officer to work with the fleet and others to manage the fishery under the new Regulating Order.

In response to a question from a Member the ACIFCO confirmed that manila clams were not landed as part of the cockle fishery.

Permitted Cockle Fishery

The ACIFCO informed Members that this was the second year that the fishery had been opened as a small-scale fishery using the existing byelaw. It opened from 1 September to 27 September 2024 with a TAC of 368 tonnes spread over four fishing trips. Thirty one vessels had applied for a permit and a maximum of twenty two participated in the fishery per week. Catches of the maximum of 3.39m³ were consistently landed. Area 14 (South Margate Sands) had been classified in time so this area as well as Area 7 (Buxey Sands) was available to be fished. It had been hoped that Margate Hook (within Area 14) would also be opened but the Food Standards Agency required more samples.

Yields were approximately 15% with the yield higher in Area 7. However individual cockles and meats were larger in Area 14 which resulted in a more valuable product.

This fishery was seen as a success. The stocks maintained the number of vessels that fished on it for the four weeks, and it was hoped that this would allow the permit fishery to be refocussed as a reliable small-scale fishery that could take place each year.

TECFO 2024

Members were advised that the Order had been laid before Parliament in early November but had been slightly delayed.

Officers would send out the application forms to apply for the new licences from 9 December 2024, which would need to be submitted by 19 January 2025. Members would meet on 27 March 2025 to agree the ranking order drawn up by the Applications Panel and would award the new licences.

The fishery would begin in June 2025 dependent on stock surveys.

Members were reminded that the membership of the Applications Panel had been decided at a previous meeting. Five members from the IFCA would sit on it together with two independent members: one for the AIFCAs and one from CEFAS.

Members **NOTED** the report.

30. SMALL SCALE MANILA CLAM TRIAL OCTOBER 2024 (B3)

The CIFCO reported to Members that eight fishermen had taken part in the trial and that officers greatly appreciated the time and effort that they took to get the fishery up and running. A great deal of ingenuity had been shown in the development of successful fishing gear. Good data had been received from the fishing boats which were of different sizes and used different platforms of fishing gear. The weather had not been good, so a lot of adaptation had to be made.

The report provided to Members was an update only. The trial had begun on 1 October 2024 and lasted for four weeks. For the first week trialists set up and tested their gear and no landings were permitted. For the remaining three weeks, each trialist was allowed two trips per week with a maximum of 300kg allowed per trip in weeks two and three and a maximum of 500kg in the final week. During this time officers worked with the trialists to develop sampling techniques dependent on the vessel size and set up. Twenty-eight boardings and four landings were carried out. Eight sets of fishing gear were measured and one hundred and sixty-five samples processed which included 18,500 clams.

Two trialists used a dry dredge, four used a batch dredge with water injection and two used a suction dredge. The dry dredge did not catch well and it was considered that the ground was too hard in the trial area for it to work effectively. The batch dredge with water injection worked well, sorted the clams and cockles effectively and had low damage rates.

Members were informed that the areas where the manila clams were found were complex. They were predominantly found in cockle beds within MPAs. Officers had worked closely with NE to make sure the project answered any questions they might have and officers were appreciative of their support. Officers had met with NE to feed back some details and would be working with their national shellfish team. Discussions had been held on how to undertake benthic impact trials. This would be important to put into an assessment for NE to see how the ground recovered. This would likely take place in March 2025.

It was intended to carry out one to one interviews with the trialists to understand the markets and how a trial next year would work. Officers would continue to update Members on progress at the meeting in January.

10:50 The Clerk to the IFCA joined the meeting

Members made the following comments:

- There had been talk that the fishery should be open for all fishermen. If that were to happen there was a danger the stocks would be quickly depleted. There needed to be management and potentially a licence system.
In response the CFO stated that there were very specific beds that had been identified found in a MPA. The IFCA would be deciding what management should be in place taking into account stock and effort. There had been talk of other beds and the IFCA had asked for details of these from fishermen but had had little response

10:55 Cllr Hills joined the meeting

- At the next trial would the speed of the vessels be monitored as this would vary the weight on the dredges
In response the CFO stated that all boats for this trial had GPS handsets provided so the IFCA was able to see where they fished and how long for.

The Chairman allowed a comment from Mr Chris Attenborough, Chairman of Whitstable Fishermen's Association.

Mr Attenborough wished to stress to the IFCA that there were financial and time implications in setting up for this fishery and that there had been a loss in revenue as a result of getting the boats ready to take part. In future it would assist if the application process was earlier as this would allow time to set up the required gear.

Members **NOTED** the report

31. FISHERIES MANAGEMENT PLAN CONSULTATIONS (B4)

Members were provided with details of the current round of FMP consultations relating to Cockle FMP, the Southern North Sea and Channel skates and rays FMP and the Southern North Sea demersal non-quota species FMP. The consultation process opened on 10 October 2024 and would end on 19 January 2025.

The CFO informed Members that these plans covered two important fisheries within the District; cockles and thornback rays. Other fisheries covered within the plans did take place but these were at a smaller scale and of lower economic importance.

Cockle FMP

This contained a lot of actions but officers were reasonably confident that these would not change or alter the current or future management that was in place. It was seen as positive to feed management systems into a broader, national system; standardisation across the board would be helpful. The IFCA's fed into the plan early and consider that it is heading in a sensible direction.

Southern North Sea and Channel skates and rays FMP

Thornback rays were classed as an important local species across the district. Officers had contributed to the working group that helped create and structure this FMP. Work undertaken in the SUMARIS project which had focused on the future management of this group of species had been submitted to the group and had been used to help frame some of the key actions and management measures in the FMP.

Southern North Sea demersal non-quota species FMP

This FMP addressed a number of species that were not currently part of the quota management system.

- bony fish

- elasmobranchs
- cephalopods

It was acknowledged that many of the species covered in the FMP were not as important to local fishers as species like bass, sole or thornback ray. However they could provide an extra income to some fishers and do contain species like cuttlefish that could become more abundant as water temperatures rose. The proposed new measures to control flyseining were also welcomed.

Members made the following comments:

- Recreational anglers already have strict size limits in respect of bony fish such as john dory which match fishermen have to abide by. Recreational fishermen need to be consulted in addition to commercial.
- With regard to the Cockle FMP:
 - Action 2 - It should be clearer what is meant by private fisheries; it should be noted that there are other archaic areas in addition to private fisheries where cockles can be found.
 - Action 3 - Odd that national capital has been tacked on. It didn't appear to relate to the action that was proposed. Possibly these should be moved to action 4 as it would fit quite nicely there. None of the evidence looks at cultural and social issues. It is mentioned but nothing appears to be being done. Perhaps bring in global warming to this action. Will this affect the bird/food interaction.
 - Action 5 - Who will pay for a national forum.
- Interested in where this will go next. The viability of the market is an issue. Fishermen have got to make a living. We know we have warming oceans and there is a forecast in Kent of a 4° rise in air temperature by 2080. Where is the direction of travel with this and where is the finance coming from to help.

The Chairman allowed a comment from Mr Chris Attenborough, Chairman of Whitstable Fishermen's Association.

Mr Attenborough stated that there was poor thornback ray stock in the Thames Estuary. Landings would normally be 100kg to 125kg per day but were currently much less. The biggest issue appeared to be seal predation.

Members **NOTED** the report

32. CONSTRUCTION OF NEW CABIN RIB (B5)

The ACFO informed Members that contracts had been signed with Ribcraft and that the build of the RIB had begun. Officers were receiving weekly progress reports from the boatyard and had visited the yard on 12 November. They were expecting to visit again

once the hull had come out of its mold, which would be in January. The delivery date was due to be 29 May 2025.

Members **NOTED** the report

33. ANNUAL REPORT (B6)

The ACIFCO informed Members that the IFCA was required to provide a report each year setting out the main achievements of the Authority. Members had been emailed out the report and were asked to comment on the content.

Members **APPROVED** the report

34. MATTERS FOR REPORT (C1-C6)

Members received:

- Quarterly Report of the Kent IFCO (C1)
- Quarterly Report of the Essex IFCO (C2)
- Quarterly Report of the Patrol Vessel 'Tamesis' and 'Vigilant'(C3)
- Quarterly Report of the Patrol Vessel 'Nerissa' (C4)
- Recreational Angling Report (C5)
- Enforcement Report (C6)

Meeting broke for refreshments 11:30

Meeting reconvened 12.00 for Kent & Essex IFCA Changing Seas Conference.

Also in attendance:

Felix Ameye (Seafish), Tallula Ashdown (Essex University), Chris Attenborough (Whitstable FA), Tom Bennett (Fishing industry), Daniel Berrett (Essex University), Mike Best (Environment Agency), Thea Cox (ZSL), Mark Davison (Environment Agency), Phil Edwards (Fishing industry), Dave Ferris (Fishing industry), Thomas Gibbons (City of London), Morwenna Grigg (ZSL), Mark Kennedy (Thanet DC), Rachel Langley (Essex WT), Hannah McCormick (ZSL), Alison Miles (EA), John Pinnegar (CEFAS), Max Renton (Kent WT/Adonis Blue), Andy Riches (Fishing industry), Alex Senechal (MacAlister Elliott), Jacqueline Seroka (City of London), Alex Smith (Essex WT), Michael Steinke (Essex University), Graham West (Fishing industry), Emily Whittaker (Thanet DC), Jason Lengden (Fishing industry).

The Vice Chairman, Mr John Nichols, welcomed all those who were present. The conference had been convened as a result of a meeting that he had with the CIFCO when he and two other fishermen had expressed their concern at the changes in fish stocks that appeared to have happened in the Kent and Essex district. Fishermen were very worried and wanted to understand what was happening and why.

The CIFCO informed the conference that the key objective was to try to understand what was changing and to try to quantify that change. The focus of the conference was to ask those present to agree the stocks that were increasing as well as those that were decreasing.

The following presentations were provided to the conference:

- Thames Lower WFD waterbody (The last ten years-ish!) (Mark Davison – Environment Agency)

Mark Davison outlined the Environment Agency's (EA) water quality data collection programme, highlighting the key parameters monitored and the locations in the Thames Estuary where data was collected. He explained how this data was used to assess the environmental status of the water bodies in the region.

The results demonstrated a clear gradient in chemical concentrations across the Thames, with levels decreasing as one moves downstream from the river and into the estuary—e.g., lower dissolved nitrogen levels further downstream. The data also revealed strong seasonal variations in many parameters, such as reduced chlorophyll levels during the winter months.

Importantly, the majority of monitored chemical pollutants were already meeting good water quality status. The few pollutants which still failed to meet standards included: Benzo(ghi)perylene, mercury and its compounds, polybrominated diphenyl ethers, tributyl tin, and cypermethrin. Trends in these chemicals had remained relatively stable over the past decade. However, climate change—particularly elevated summer water temperatures and increased runoff from heavy rainfall—could interact with water quality parameters, potentially exacerbating their effects.

- “You are what you eat?” Changing nutrients and plankton in the Thames and Thames embayment (Mike Best – Environment Agency)

Mike Best discussed the importance of the ratio between Dissolved Inorganic Nitrogen (DIN) and phosphate in determining the dominance of various plankton communities in water bodies. This ratio had been steadily increasing since 1998, alongside rising DIN levels. As with the trends observed in water quality, there was a distance-decay effect from the source; however, the results revealed that as the nitrogen-to-phosphate ratio increased, the number of plankton cells in samples had gradually risen since 2005, with a more rapid increase from 2014 onwards. Notably, this increase was observed in

smaller plankton cells, while larger plankton species have declined in abundance. There was a growing presence of dinoflagellates, accompanied by a reduction in diatoms. The impacts of these changes further up the food chain remained poorly understood. It appeared that zooplankton may be responding to these shifts, and by measuring carbon in plankton, it might be possible to gain insights into the food supply for fish and shellfish. Further offshore, large-scale changes in plankton communities were occurring, some of which were mirrored in the changing fish assemblages. In conclusion, attendees were reminded that changes in plankton communities interacted with multiple other drivers, all of which influenced the marine ecosystem.

- Highlights from the Shore Search survey results in the Thames over the last decade (Max Renton – Kent Wildlife Trust – Adonis Blue)

Max Renton discussed the history and methods used in ShoreSearch to record benthic communities as part of the Wildlife Trusts' citizen science programme. He explained the key sites and species being monitored. Species sensitive to climate change, such as the flat topshell had been expanding their distribution range since the 1990s. Additionally, Kent may begin to see two species of anemone more commonly: the Snakelocks anemone and the Strawberry anemone. ShoreSearch also monitored invasive non-native species, including red pompom weed, Sargassum seaweed, the American oyster drill and Pacific oysters.

13:20 to 13:50 lunch

- Fish distribution changes in the North Sea – past observations and future projections (John Pinnegar – CEFAS)

Climate change had significantly affected fish distributions in the southern North Sea. John Pinnegar reported a marked increase in autumn bottom temperatures in the southern North Sea and English Channel from 1993 to 2021, with a 95% confidence level based on a 100-year dataset. These changes impacted fisheries by affecting habitats, fish resources, economics, and sustainability.

A strong northward shift in species distributions had occurred, with 70% of fish species moving 48–403 km north. Demersal fish had also migrated to deeper waters, increasing by 3.6 m per decade. For example, plaice had moved from 40 m to over 60 m depths, shifting from southeast to the northwest of the North Sea. Sole had retreated to the English Channel and now stayed in shallow waters year-round.

In contrast, squid distribution had expanded, occurring at 20% of survey stations in 1984, rising to 60% in 2014. In August 2022, Cefas' WaveNet buoys recorded some of the highest seawater temperatures around the British Isles, exceeding 21°C off the Thames Estuary. This coincided with reports of moribund whelks in traps from the North

Kent Coast, confirmed by KEIFCA officers. Cefas was now developing 'habitat suitability' models for whelk, Nephrops, scallop, lobster, and crab.

- The Increase of Seals in the Thames Estuary over the last decade (Hannah McCormick – ZSL)

Hannah McCormick from ZSL discussed the changing distributions and abundances of Harbour seals and Grey seals. She highlighted the morphological differences between the two species and their distribution ranges. Hannah explained how outbreaks of distemper virus in 1988 and 2002 caused significant declines in the harbour seal population. Using fly-over surveys, she presented detailed spatial distribution data from the Thames Estuary. Two clear trends emerged:

- 1) the harbour seal population had halved since 2015, and
- 2) the grey seal population had significantly increased.

The grey seal population was now estimated at 2,988, while the harbour seal population is estimated at 600 individuals. These declines in harbour seals are consistent with trends observed elsewhere in the UK and may be attributed to

- 1) competition with grey seals,
- 2) disease or toxins, and
- 3) changes in prey availability.

- Changing Seas Fisher survey results from Kent and Essex (Will Wright – KEIFCA)

Members were informed that the KEIFCA Fisheries Liaison Officer had interviewed twenty commercial and fourteen recreational fishermen, asking about changes to 35 nominal species observed over the past ten to twenty years. Interviewees included fishers that use a wide variety of gear and the majority had more than thirty years' experience. Comments made by fishermen highlighting the scale of these changes were made, such as:

- "Sole has gone from 30 stone to 3 stone a day if you're lucky."
- "Bass now spread to sole grounds. They're unavoidable."
- "Cod was caught in tonnes. I've not caught one inside the estuary in 10 years."
- "Thornbacks have gone from 200 stone a day to... no more than 4 stone this year."
- "I used to see seals on Margate Sands, but only very few."

Philip Haupt (KEIFCA LSCO) presented the results, showing strong agreement between commercial and recreational fishers regarding species changes, direction, and magnitude. This widespread agreement across the district validates the concerns raised by fishers.

A trophic-level analysis revealed the following:

1. Apex predators (e.g., grey seals, conger eels) had increased in both species number and abundance.

2. Meso-predators (e.g., bass, smooth hound, spotted dogfish) had substantially increased, while cod had almost disappeared from the system.

3. Prey species (e.g., pouting, sprat, herring, whiting) had declined across the board, potentially causing feedback loops in the ecosystem.

4. Flatfish (e.g., dab, lemon sole, turbot, sole) had substantially declined, a trend confirmed by MMO landings data and ICES reports for the larger North Sea.

5. Crustaceans, including brown crab and lobster, had significantly declined, while spider crabs had increased.

These findings aligned well with Dr. John Pinnegar's earlier presentation, particularly the reduction in flatfish and their changing distribution.

A further presentation was provided to Members during their break for lunch

- Seaweed – Ian Titley, Phycologist, Natural History Museum London

Ian Titley from the Natural History Museum, London, highlighted several key points which were displayed on a slide during lunch. Notably, he discussed the decline of native kelp species in the southeast, particularly in Kent and especially Thanet. Species affected include oarweed, sugar kelp) and forest kelp) He noted that multiple factors were contributing to this decline, but the primary driver was likely climate change, which was causing much warmer coastal waters in the region. Key changes associated with this included the rise of invasive red pompom weed and a shift in intertidal benthic cover towards turf algae.

Following these presentations the following comments/questions were raised:

- Eelgrass appears to be becoming more prolific in Leigh. NE says that it can't be touched. How prolific is this species and how does it affect water quality – in response Mark Davison advised that the EA carries out surveys in that area. The species is increasing. In 2007 at Two Tree Island there were 101.4 hectares and in 2023 this was 168 hectares. More could also be found at Leigh, Thorpe Bay and Shoeburyness. Eelgrass will take phosphates and nitrates out of the water but minimal amounts. Essex University was looking at this and carrying out their own research.
- CEFAS used to monitor levels of cyanide and mercury in the water. Did the EA do this – in response Mark Davison said that the EA continued to monitor these levels which were so low that they were not deemed necessary to publish. There were newer, emerging chemicals that were being identified and CEFAS was putting more effort into these and attempting to identify the worst culprits. There was constant discussion to identify these and carry out analysis.

- Could pacific oyster spat be removed from the chalk ledges in the district. – in response Max Renton advised that the spat was too small to remove and the main issue was funding. A control program took place on the Western Undercliff site in Ramsgate where a hole was put in the oyster shell which killed it without damaging the chalk reef. However, the species spread too easily and could not be eradicated. It was accepted as locally naturalised.
- The Spring sole fishery failed completely this year. Some catches had been landed in the Autumn, but very little undersized fish were being seen
- Most of the North Kent fishery was a sole fishery/breeding area. If a nursery area is disturbed, then the sole did not return. Dredging in the Thames Estuary had resulted in quantities of material being dumped in these areas and covering the eggs.
- Were there any fixed monitoring or ways to stop seals from attacking catches – in response Hannah McCormick advised that the MMO was researching deterrents for seals. It was being seen as a priority, but they were struggling to find a successful method to deter them.
- Had ZSL taken into account behavioural changes in seals – in response Hannah McCormick stated that in depth studies had taken place eight years ago where seals had been tagged to see where they were going and their scat examined to see what they were eating. These could potentially be repeated.
- Over the last three years fishermen had been seeing seals leaping out of the water to attack birds and eat fish they wouldn't normally go for. They also appeared to be fighting amongst themselves – in response Hannah McCormick advised that grey seals were voracious eaters and aggressive. They would predate on young and harbour seals
- Had fished for 52 years in the southern North Sea. They had always been large quantities of grey seals. Only since there had been an increase in harbour seas had there been problems.
- The amount of data we have is not new. This has been going on for four years. We need to make people listen; Industry is not being listened to. There was a need to get the AIFCA and MPs on board. This is not going away. An IFCA on its own will not achieve anything. MPs and Ministers must be got on board to get Government to put money into this. If they are concerned about coastal communities then they must be able to demonstrate realistic decision making. We have started something today, let's take it forward. Get DEFRA down as well as MPs and have CEFAS and the EA present to them. We have evidence and without evidence they won't do anything. The first thing to do is to take this to the AIFCA meeting.
- In future meetings look at how the habitat and nature of the Estuary has changed. This could be playing a role in why changes were happening. It was important to acknowledge the loss of seagrass and native oyster bed. Habitat restoration and recovery of the ecosystem scale was very important.

- As well as its work on whelks the University of Essex was looking at nuisance seaweeds. Green and gut weed were an issue in France with concerns that they could smother beds.
- It was necessary to separate out local pressures from national ones. The Changing Seas Fisher survey conducted by the IFCA should be replicated around the country

Members were advised that the conference had highlighted a range of significant changes:

- 1) the majority of monitored water quality parameters passed but there was a need to address failing parameters,
- 2) shifts in DIN to phosphate ratios were affecting plankton communities, with a rise in smaller-bodied dinoflagellates,
- 3) changes in the benthic community and the spread of invasive species,
- 4) a shift from cooler-water kelp communities to turf algae dominance,
- 5) changes to geographic distributions of many of the fish formerly common in the North Sea,
- 6) an increase of grey seals, but a decline of harbour seals in the district.

Members were informed that while further study was needed to determine if these changes signalled a true decline in biodiversity or a disruption of ecosystem processes, they represented a clear issue for fishers. Many commercially important species, on which their livelihoods depend, had substantially declined or disappeared, making it increasingly difficult for them to sustain their businesses.

KEIFCA, as the inshore fishery manager, had limited capacity to address large-scale ecological drivers like climate change and habitat loss, or issues outside of its remit, such as water quality. Therefore, it was crucial to identify the most useful actions going forward to support our fishing communities. The involvement of fishers, universities, NGOs, and government bodies highlighted the widespread concern.

In an effort to take the findings of the conference forward there was general agreement from the floor to:

- Collaborate with other IFCAs to enhance the study and present the findings at an AIFCA meeting
- To build on the findings of the conference with CEFAS, the EA and other agencies, and after more detailed discussions with these organisations and local fishers, report back options to the Authority.

Meeting ended 15:20