

**Rural Economy and Connectivity Committee, Call for Evidence
Impact of COVID-19 on the rural economy and connectivity – June 2020**

Introduction

SIFT's response relates to the Scottish inshore fish catching sector. For the purposes of clarity and context, we set out key data which illustrate the national importance of the sector:ⁱ

- In 2018 80% (1679) of Scotland's 2089 fishing boats were less than 12 metres in length. These small boats typically fished exclusively in inshore waters. 635 were registered to East Coast districts, 482 to the Shetlands, Orkneys and Western Isles districts, and 562 to West Coast districts, although boats do not necessarily fish the district in which they are registered.
- In 2018 some 93% of landings (both by tonnage and value) from these under 12 metre boats was shellfish. The dominant target species were prawns, scallops, crabs and lobsters.
- 1539 of the 1679 under 12m boats are 'Under 10s' (less than 10 m long), the great majority (1347) of which use static gear (creels) to target crabs, lobsters and prawns. 68 Under 10s are prawn trawlers and the remaining 124 are classified as 'other' which includes mechanical dredging, suction dredging, and shell fishing by hand, largely for scallops and razor clams.
- Of the 550 boats over 10m, 347 were shellfish vessels (110 were creelers, 146 were prawn trawlers and 91 were 'others'), 184 were demersal fishing vessels (mainly targeting haddock, cod, monk and saithe) and 19 were pelagic fishing vessels (mainly mackerel and herring).
- In 2018 the value of shellfish caught by the different Scottish shellfish gear types was: creel fishing £60.2m; prawn trawling £53.6m, scallop dredging £38.4m and hand diving £5.8m.
- In 2019, with a provisional landings value of £193m, shellfisheries were of greater value than either demersal (£187m) or pelagic fisheries (£183m)ⁱⁱ.

4 TO WHAT EXTENT HAS THE SECTOR BEEN EQUIPPED TO MITIGATE THESE IMPACTS DIRECTLY AND TO WHAT EXTENT HAS IT NEEDED TO RELY ON INTERVENTIONS FROM SCOTTISH AND UK GOVERNMENTS / OTHER EXTERNAL BODIES?

The inshore fish catching sector has not been well equipped to effectively mitigate the impacts of Covid 19. This is because of the narrow structure of the sector: it is overly dependent upon sales of shellfish (comprising 93% of the value of under 12m boats' landings) and relies largely on just the export and the domestic hospitality industry markets. When these markets closed in late March 2020, the sector was unable to adjust its business model to target alternative species or identify adequate new markets for existing target species. This had the following consequences for the sectorⁱⁱⁱ:

- From late March through April the creel fleet was 75% tied-up, with remaining boats working circa 1 day per week to catch and sell shellfish to local markets.
- In May there was a recovery in activity as some European markets re-opened. More markets re-opened through June. However as supply exceeded demand, prices were depressed in May and June by approx. 25%. More specifically, through May to late June:
 - Prawn prices were some 30% below expectations and creeling activity operated at 60-70 % of normal. Direct sales to the Scottish public helped mitigate loss of export and hospitality sales for some fishermen (though wholesalers and processors did not benefit from this). Although some European markets re-opened by June, prices remained depressed by up to 30%, possibly due to excess supply over demand.
 - Lobster prices were initially 25-50% down although in June there was a recovery and landings rose in line with seasonal norms. By late June prices were only 10% down.



- Crab prices were less affected, possibly due to continued demand from China (supplied from Scotland via the Netherlands). However, in June the Chinese market contracted due to the re-emergence of coronavirus in the Beijing food market.
 - The hand-dived scallop fishery experienced a 90-100% reduction in business from late March, which continued in late June, although some direct sales by dive fishers to retail customers did mitigate some of this loss of market. Exports suffered a further barrier arising from impediments to transport infrastructure.
- SIFT understands that there was a similar initial tie-up and gradual re-opening in the prawn trawl and scallop dredging fleets but is currently unable to obtain reliable supporting data.

In view of the foregoing, interventions by the Scottish Government, through the Sea Fisheries Hardship Fund / Sea Fisheries Intervention Fund announced by the Scottish Government on 25th March (and subsequently) are understood to have been of material importance to the sector. However, SIFT is not currently in possession of data regarding the level of take-up of this funding.

Industry support offered by external agencies such as The Fishmongers Company and its partners under its COVID-19 RAPID RESPONSE GRANT PROGRAMME is understood to have been rapidly taken-up. SIFT understands that the type of projects supported included national projects with organisations like Seafood Scotland (to develop an online campaign to signpost Scottish seafood to domestic markets), to more localised initiatives helping independent merchants and small-scale fishers sell direct to their communities. Other assistance went to local associations, to assist their members to diversify their businesses. Whilst these interventions were successful, SIFT believes that there are clearly opportunities to improve co-ordination of external and government support in future.

7 WHAT IS YOUR ASSESSMENT OF THE RESILIENCE OF THE SECTOR(S) TO THE COVID-19 CRISIS, AND HOW MIGHT RESILIENCE TO FUTURE SHOCKS, INCLUDING FURTHER WAVES OF INFECTION FROM COVID-19 AND FUTURE PANDEMICS, BE IMPROVED?

The sector lacked resilience to Covid19. This is a consequence of its dependence on a narrow range of shellfish and a narrow range of markets. It will continue to lack resilience until both the management of the marine ecosystem and the management of opportunities to fish have been reformed.

Ecosystem management

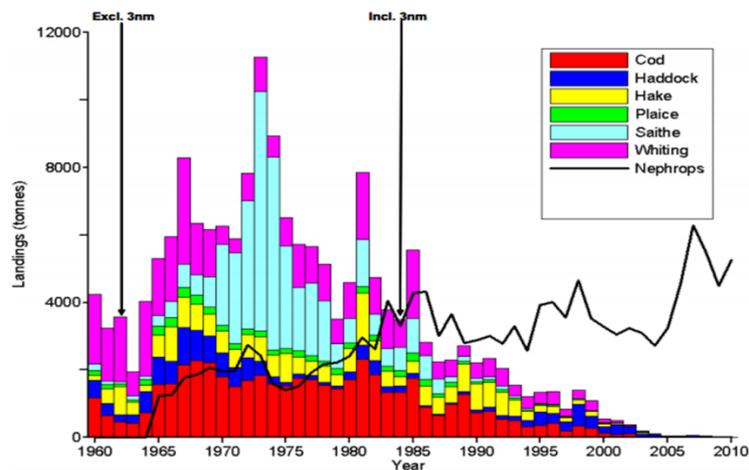
Historically, Scotland's inshore fisheries targeted a diverse range of commercial shellfish and finfish species. This species diversity ensured that the sector had resilience. If there was a reduction in the supply of, or demand for, one species, there were alternatives to catch and sell.

The sector is now almost wholly dependent upon a narrow range of shellfish species. When demand for (or supply of) these shellfish species falls, the sector has no substantive alternative species to target. This is because stocks of finfish of commercially valuable size in the inshore area are now insufficient to support a material commercial fishery. It is not possible to transfer fishing effort from shellfish to fin fish at sufficient scale to ensure the sector has resilience.^{iv}

The underlying explanation for the decline of finfish of a marketable size, and hence the sector's diminished resilience, is the failure of fisheries management. Permission to use increasingly efficient catching technology, such as fish finders, enabled increased catches per unit of effort. Whilst increases in catching-efficiency are welcome, they need to be balanced with management measures which take Maximum Sustainable Yield into account. This has not happened. However, the key event in the management of the inshore fishery and its transformation from a resilient mixed fishery to a

vulnerable shellfish-only fishery was the passage of the Inshore Fishing (Scotland) Act 1984. This Act removed the ‘3 Mile Limit’ which had banned the use of seabed impacting towed fishing gears within three nautical miles of the Scottish coast. The crucially important inshore seabed habitats which housed spawning grounds and nurseries for juvenile fish were thereafter devoid of protection from towed fishing gears. Without protection, finfish population structure changed, and commercially sized fish ceased to be sufficiently abundant to support commercial fisheries. Furthermore, there remains continuing concern that fish stocks continue to be reduced as a result of by-catch in prawn trawl gear.

Landings data from the Clyde fishery, arguably the most researched of Scottish inshore fishing areas, illustrated in the figure (right), demonstrates the decline in finfish landings as the fishery converted to a shellfishery.^v



Opportunities to fish

Notwithstanding the lack of commercial fish stocks described above, the national allocation of fishing quota presents a further, technical, barrier to the diversification, and hence resilience, of the inshore fishery. This barrier is likely to become more material if commercial fish stocks recover. This is a complex issue, the detail of which lies beyond the scope of this Call for Evidence, however it is important to recognise the key principle.

Fishing quota is disproportionately concentrated under the control of a small number of individuals and companies. Across the UK the smaller inshore boats that comprise 77% of the fleet control only 4% of quota^{vi}. The situation is the same in Scotland. In effect, the inshore fleet does not have the right to catch finfish, even if there were enough to catch. If the fleet is to diversify in future, it will need to obtain quota to do so. This will require a revision of allocation mechanisms. The lack of quota also goes some way to explain the focus of inshore boats on scallops, crabs and lobster - none of which are subject to quota. Prawns which are a quota species, are the key exception.

Any attempt to increase resilience in the inshore fishing sector therefore must include reform of quota allocation so that there is an increase in the quantity and range of quota stocks that Under 10m boats and the slightly larger ‘non-sector’ boats are permitted to target. There exists an opportunity to address the problem through the allocation of additional quota to the inshore fleet arising from Brexit negotiations. It is vital that this occurs, as it would, assuming a recovery in commercial finfish stocks, underpin a diverse fishery which would more robustly support the inshore fleet.

In the context of this problem, SIFT therefore welcomed the announcement on 1st June 2020 by Marine Scotland that additional quota worth £2m would be allocated to the inshore fishery. In particular, SIFT notes the statement by the Fisheries Minister that:

‘With continued uncertainty regarding future market access and demand, this additional £2 million of potential fishing opportunities will provide scope for some vessels to diversify’



SIFT fully supports this measure and welcomes the Minister's recognition that diversification is required. However, SIFT is concerned that the measure arose out of an emergency response to a crisis rather than a considered long-term strategy of reallocation of fishing opportunities.

Future shocks

It is important to note that the sector's shell-fish dependency puts it at risk from future shocks which are not limited to human pandemics. Other future shocks may arise from the following:

Demand side risks:

- Application of tariffs (or non-tariff barriers) to Scottish shellfish in key export markets, which would make Scottish shellfish uncompetitive.
- Politically motivated market closures –as when the Russian market for Scottish mackerel was abruptly closed in 2014.

Supply side risk:

There are also supply-side risks to the fishery arising from disease, climate change and pollution.

- **Disease.** Some of the inshore prawn stock is infected by the microscopic dinoflagellate *Hematodinium* (Field et al., 1998). This gives rise to poor-quality meat in terms of taste, texture and appearance and renders the catch unsellable. A severe outbreak of disease could collapse the supply of prawns, which would impact severely on the static and mobile gear prawn fisheries. Similarly, a parasitic disease was implicated in the collapse of the Icelandic scallop fishery (Jonasson et al., 2007). Although currently at low levels in Scotland, sudden severe outbreaks can and do occur. If this were to take place in Scotland it could have a material adverse impact upon the scallop dredging and diving fisheries.

There is a significant chance that these diseases (and others) may become more widespread in the future due to anthropogenic climate change (Howarth et al., 2014; Rowley et al., 2014), because prolonged periods of warmer summer temperatures can cause thermal stress and greater vulnerability to disease, as was the case with the Long Island Sound lobster fishery (Balcom & Howell, 2006).

- **Climate change.** Levels of ocean warming to date appear to have benefited scallop stocks around the UK by enhancing reproductive output and the survival of early life history stages (Shephard et al., 2010). However, warming oceans are likely to facilitate the establishment and spread of invasive species e.g. the slipper limpet (*Crepidula fornicata*), which could have detrimental effects on stocks of commercial species and the marine ecosystem in general (Occhipinti-Ambrogi 2007; Stiger-Pouvreau & Thouzeau 2015).
- **Pollution.** The impact of pollution on the shellfishery also presents a risk. Recent studies reveal that plastics have the potential to accumulate within prawns. (Martinez et al. 2014). A study by Glasgow University found 84.1% of Clyde prawns contained traces of micro-plastics in their stomachs, and an estimated 30% of prawns in the North Sea and 28.7% in the North Minch also hold traces of plastics (Welden, 2015). Whilst there is no evidence to date of adverse impacts on humans resulting from the consumption of such prawns, there are concerns that prolonged retention rates of these plastics in prawns could impact their growth and reproduction if leached in high enough levels.

Improvements to resilience

Improvements to the sector’s resilience are readily achievable. One solution would be to re-establish spatial protection as a key fisheries management tool in the inshore waters, so as to recreate areas where finfish and shellfish could spawn, mature and breed. Such zones would then ‘spill-over’ surplus fish into surrounding fishable zones. Adopting such management measures would bring Scotland into line with other North East Atlantic coastal states. Such spatial management could comprise a mix of:

- No Take Zones in which the spawning grounds and habitats of juvenile fin and shellfish are fully protected;
- zones where there are controls over the most damaging gear types – especially prawn trawls and scallop dredges;
- zones where the continued use of such gears would be permitted.

The case for spatial management, has been repeatedly advocated to the Scottish Government in recent years. One instance was the Regulating Order application made in 2015 for the Firth of Clyde <https://www2.gov.scot/Topics/marine/Sea-Fisheries/InshoreFisheries/clydero>. The overarching aim of the application was to introduce management measures in the Firth in order to ‘**increase the productivity and resilience**’ of its fisheries, so that three key outcomes could be achieved, one of which was to ‘**Reduce shellfish dependency and boost resilience in the commercial fishery**’. The application was turned down by the Fisheries Minister, and the Clyde fishery – like the wider national inshore fishery - has continued to be managed in a way that undermines the sector’s resilience. It should be noted that Scotland’s Nature Conservation Marine Protected Areas (which largely lack any fisheries management measures) are designed to protect specific marine features, and accordingly are not, in their current form, fisheries management tools.

The case for introducing such management measures is further strengthened by the clear evidence that a diverse marine ecosystem would also bring benefits to other marine sectors – especially wildlife tourism and the collapsed sea-angling sector – and widen the economic base of the coastal economy.

11 WHAT SHOULD THE SCOTTISH GOVERNMENT BE DOING TO SUPPORT THE SECTOR(S) IN QUESTION TO DEAL WITH THESE FUTURE CHALLENGES?

The most important action that the Scottish Government can make to support the sector, would be to recognise that it lacks resilience as a result of structural management inadequacies. Material changes to management offer the only long-term solution. Short term bailouts in response to external shocks, as has happened in 2020, will not enable the sector to deal with the future challenges it inevitably faces.

It is important to note that the types of fisheries management measures referred to above are consonant with the Scottish Government’s ambitions to implement a green recovery from the current crisis. Furthermore, and crucially, if implemented, they would ensure that the sector could, in times of future crisis, supply both local and national food markets, instead of being largely tied-up and in need of emergency funding.

ⁱ Scottish Sea Fisheries Statistics 2018, Marine Scotland

ⁱⁱ Provisional 2019 Sea Fisheries Statistics, Scottish Government, 2020

ⁱⁱⁱ Pers comms with Scottish Creel Fishermen’s Federation, June 2020

^{iv} Scottish Marine and Freshwater Science Report Vol 3 Number 3. Clyde Ecosystem Review, McIntyre, F et al

^v <https://journals.plos.org/plosone/article?id=10.1371/journal.pone.0011767>

^{vi} NUTFA