

Shellfish Management

The shellfish industry in Scotland lands a variety of species, the majority of which are not controlled by EU quota. On the whole, it is these species that are discussed within this paper, although there are of necessity, references to Nephrops, a quota species, as the single most valuable component of the shellfish industry. The SFF retains a Nephrops Working Group for any significant issues to be dealt with. Scallop matters, as a discrete fishery, are also addressed in the SFF's Bi-valve Working Group.

The SFF along with the Marine Scotland, initiated the original Scottish Inshore Fisheries Action Group (SIFAG) which was the primary stakeholder consultative group for Scottish Inshore Fisheries until May 2011. SIFAG was then superseded by the Inshore Fisheries Management and Conservation group (IFMAC). SFF members seek to engage with work under that umbrella to ensure it maintains a management lead for inshore fisheries.

The Inshore Fisheries Groups (IFG) system first instigated by the SIFAG has now evolved to include 3 island groups and 2 mainland groups with powers to the 6nm limit. The SFF and associations have, from the outset taken a great part in work in these groups, and will continue to engage in the IFG's and any subgroups which may be formed, in order to achieve sustainable fisheries for all fishermen.

It is the intention of the SFF to continue engaging in these work streams in Scotland, with the Inshore Working Group (IWG), serviced by a policy officer, being the focal point of Inshore Fisheries decision making within the Federation, while maintaining the Nephrops and Bi-valve Working Groups. The IWG should serve as an appropriate place to ensure that the SFF has a clear input into the structure of the various management groups, particularly on matters concerning the IFG's, which may in time become responsible for managing inshore fisheries.

In practice the IWG directs the policy officer, who then through a series of formal and informal meetings with the Marine Scotland Inshore (MSI) team, promotes the SFF policy on the inshore fisheries. The IWG will also regularly invite updates from MSI staff.

Further to the work streams promoted through the FMAC, the appropriate association secretaries and the policy officer will engage with relevant groups at a UK and an International level to ensure SFF policy on inshore fisheries management is taken into account on the wider scale.

The Fleet

	Creel	Hand	Dredge	Nephrops Trawl	Demersal	Pelagic	Total
2000	1529	41	108	314	550	38	2580
2001	1543	40	107	322	547	36	2595
2002	1559	45	103	308	465	33	2513
2003	1522	46	103	296	399	29	2395
2004	1539	48	110	289	382	26	2394
2005	1532	47	112	285	375	25	2376
2006	1420	36	110	269	368	21	2224
2007	1412	38	101	267	351	22	2191
2008	1418	4	94	274	355	24	2205
2009	1405	70	92	275	307	25	2174
2010	1409	73	90	269	285	24	2150
2011	1403	189	-	257	222	24	2095
2012	1376	189	-	251	206	24	2046
2013	1364	193	-	241	199	23	2020
2014	1376	201	-	242	190	21	2030
2015	1385	43	102	228	237	20	2015
2016	1400	39	98	234	243	19	2033

Figure 1: Active Scottish Based Vessels by Main Fishing Method

These figures are extracted from the annual publication Scottish Sea Fisheries Statistics, noting that from 2011 hand gathering, dredging and gill nets were combined as “others”.

Between 2015 & 2016 Creel, Nephrops and Demersal added a small number of vessels, while Hand and Dredge dropped a small number.

As of 2016 the fleet now consists of 1439 Shellfish “boats” (1572 in 2010) 234 Nephrops Trawlers (269 in 2010) 243 Demersal vessels (285 in 2010) and 22 Pelagic vessels (24 in 2010).

The active Scottish fleet has decreased by 547 vessels since 2000 (117 vessels since 2010), which highlights the impact of the decommissioning projects early in the century, the biggest drop being 307 demersal vessels, but also 129 creelers less, 80 less Nephrops Trawlers and 19 less Pelagic vessels.

Employment numbers are more difficult to attribute to method of fishing but in summary show that there has been a steady decline from 6637 fishermen in 2001 to 5218 in 2010 and only 4823 in 2016.

The Catch

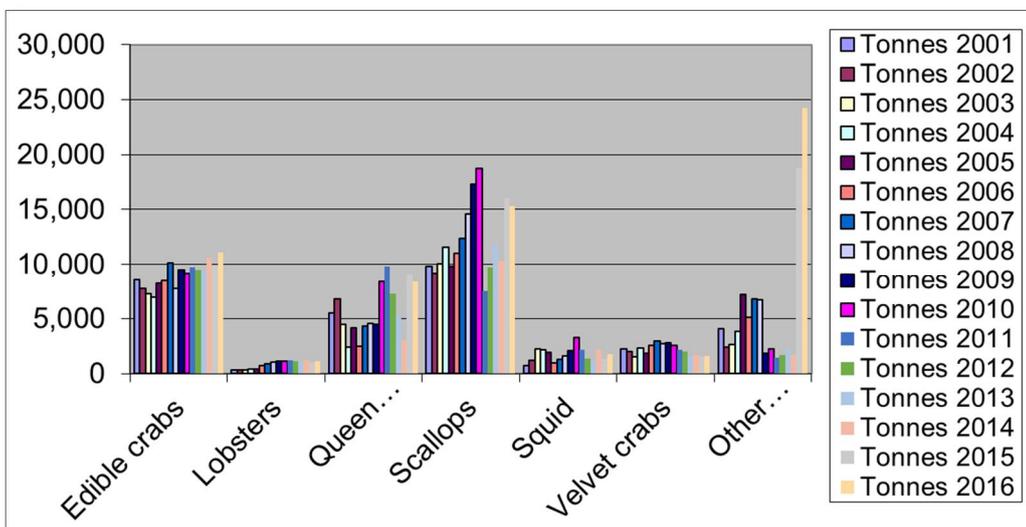


Figure 2: Shellfish Landings into Scotland, 2001-2016

By Volume

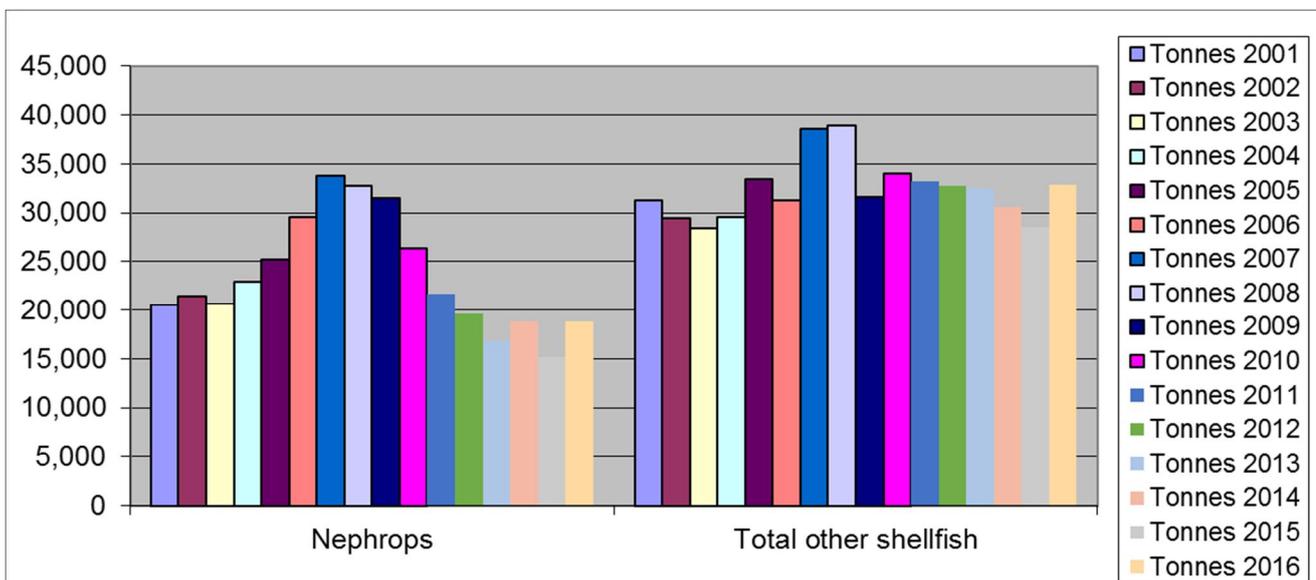


Figure 3: Nephrops against Total Other Shellfish Landings, 2001-2016

The volume of shellfish landed into Scotland, illustrated for 2001-2016 in figure 2, may be uncertain prior to the 2006 introduction of the Registration of Buyers and Sellers (RBS) and certainly in a lot of cases would have been estimates.

Despite seeming low 2006 totals, following the implementation of RBS, 2007 and 2008 showed much higher volumes than previously and since 2010 levels of non-quota shellfish landings seem to have settled for the moment in the low 30,000T range.

It should be noted that although these figures show an increase, early years figures may not be as robust, an element of this increase could be incremental (due to technological creep and increased effort) and the introduction of the RBS legislation would certainly have influenced the upward movement of totals.

Although Scotland had not until 2010 seen the dramatic increase in effort on shellfish that the rest of the UK had experienced (which may or may not be down to the factors described above), DEFRA and the EU have recently been taking more interest in shellfisheries and the under 10m “inshore/artisanal” fleet. Similarly the Scottish Government, for many reasons, has begun to more closely scrutinise the industry. Changes in legislation north and south of the border will place an added administrative burden on what were previously almost unregulated fisheries.

By Value

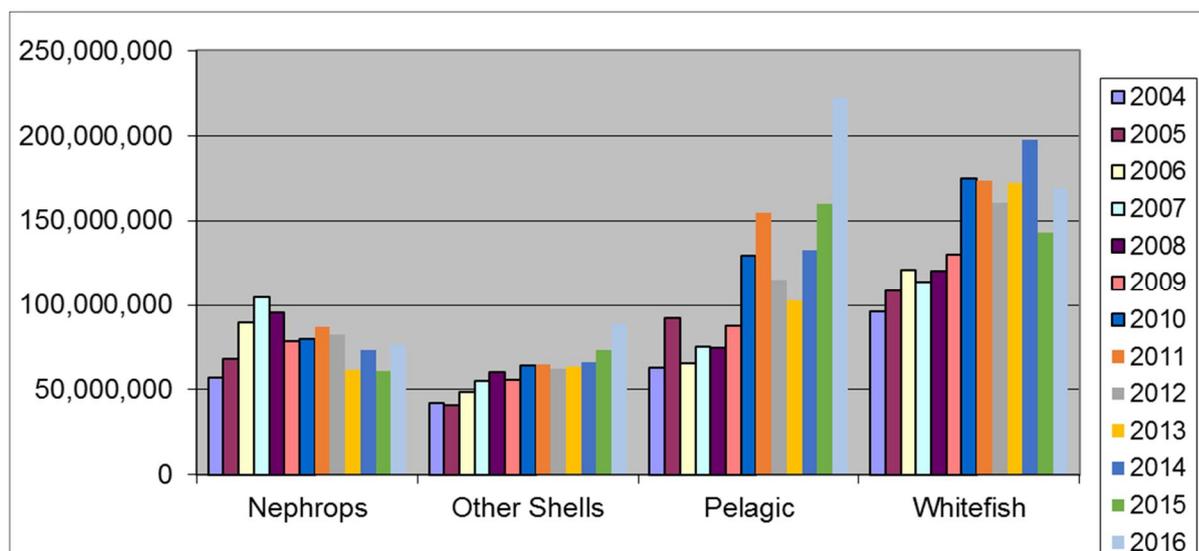


Figure 4: Scottish Seafisheries Statistics, 2004-2016

The most striking figures are, for 2016, Mackerel @ £167 million; Nephrops @ £76.7 million; Haddock @ £37 million; Hake @ £18.4 million; cod @ £27.4 million; Monkfish @ £35 million and Scallops @ £37 million.

Associations feed their locally developed policy for these species into SFF Focus groups and in the context of the “other shellfish” at £89 million this policy is addressed to them.

Crab and Lobster

Association secretaries, with back up from policy officers, led the previous Scottish Fisheries Council (SFC) Crab & Lobster group from inception, and would expect to continue being involved in this work in any new inshore group of the IFMAC. The work of the SFC group led to the realisation that the Scottish crab market was inextricably linked to the produce of Ireland, Wales, England, Jersey and France, which led to the formation of the Trans-National Brown Crab Management Group, including the SFF, NFFO, KFO, WFA and SAGB, with secretarial duties falling to the SFF policy officer.

This wider group commissioned a report on the “Future management of Brown Crab in the UK and Ireland”, hereinafter referred to as the Crab report, which had wide industry participation, including public meetings for fishers to have an input. The findings of the Crab report were agreed as the basis of SFF policy on the subject by the Inshore sub-committee at that time, being revised in 2018. This policy will inform SFF dealings with Marine Scotland and DEFRA. Having seen the benefits of working together with other groups, the SFF went on to become a partner in the A(tlantic) C(rab) R(esource) U(sers) Net(Network) which ran until 2015.

The Scottish Crab sector is best split by defining a small full time offshore Vivier sector, a seasonal offshore/inshore sector (some with vivier capacity) and the smaller traditional inshore boats. Number of boats in the region of 1400, employing up to 2,000 fishers, landing in the region of 13,600T work approx. £19.3m.

The main Scottish fishing areas can be categorised as Inshore (West Coast, Western Isles, North Coast, Northern Isles, Aberdeenshire/Moray Firth and South East (which extends south of the border)), and Offshore (the Windssock and deep water to the West of the Northern Isles.)

One important issue that must be addressed is the fact that there are something like 2000 vessels (throughout the UK) which have valid entitlements to fish for crab, but currently do not exercise that right. The active fishers are aware that some restrictions on effort may be inevitable, but expect to benefit in the long term. The prospect of this long term benefit luring “latent” entitlements into operation and destabilising the industry – reinforcing the boom/ bust cycle is a major barrier to the acceptance of new management measures.

It is acknowledged that the science base for crab stocks is sparse, but the best available evidence would show that on all the identified stocks catching is at or above the level of fully exploited. This is further complicated by the market being grossly over-supplied at peak times, leading to a collapse in prices. Therefore it would be appropriate for industry, in the spirit of sustainability to adopt the precautionary approach to these fisheries.

Evidence from the public meetings held as part of the process of the Crab report, suggests participants in the fishery are keen to manage the fishery in a sustainable manner, to help keep control of the resource in their own hands. There is a general aversion to the fishery being subject to a quota management system similar to that developed under the CFP. There is general agreement that subject to over-arching national strategy, crab stocks will be best managed on a regional basis, with a clear difference between the 4 Inshore and Offshore fisheries.

All the evidence points to effort increasing, with creel numbers climbing steadily. The SFF supports the principle of controlling the number of vessels involved in the fishery and helping new entrants.

Proper standards of gear marking should be encouraged, with due regard to the size of vessel and method of working, to help avoid possible conflict and to ensure that safety is not compromised by any impractical legislative demands.

The Inshore Fisheries Groups would be ideally placed to manage limits in the inshore, with support from Marine Scotland Compliance (MSC). MSC would need to lead on management in the offshore sector.

The international community of vivier tank fishing vessels have met each spring to address their own particular sectors' problems and as a result of this have attempted to limit voluntarily their landings throughout the summer months.

The landings figures would suggest that restrictions on the vivier sector would have the most significant effect on the entire industry. On the basis that this fulfils the need to limit effort the SFF would support this voluntary management as an example of self- management, rather than give the responsibility to others.

Generic measures which the SFF would support include bans on landing berried crab, soft crab and claws. There would also be support for escape hatches.

The measures described also need to be aware of any unintended consequences which may occur in terms of limiting access to new starts, and also to those fishers for who crab is only part of the mix of their operation.

Velvet crab accounts for a tonnage equal to 16% of Brown crab, but sell for twice the price. As for the brown crab, science is lacking, so it may be appropriate to consider capping effort on this species also.

Lobster fisheries are subject to the same data constraints as the other creel fisheries, but continue to be unusually fruitful. Rather than wait until the boom peaks, the SFF would support a cap on effort in this fishery, to try and avoid a bust.

Problems in marketing have become apparent, no doubt exacerbated by cheap imports. In the foreseeable future it would be hoped that the proposals being made on Crab Management will have a positive impact on the Lobster fishery and this stock may be managed at the local regional level.

Summary

- Regional management areas with appropriate scientific backing.
- Support well designed data collection system.
- Oppose introduction of CFP style quota management.
- Gear Marking compulsory, as far as practical and safe.
- Bans on landing berried crabs, soft crab, claws.
- Support for escape hatches and other selectivity measures.

Other Stocks

These include Velvet crabs, Queen Scallops and “Others” with a value of approx £7m in 2016, although it is not possible to deduce the number of boats or fishers involved.

(Squid although classified as other shellfish are mostly prosecuted as a diversification for Whitefish/ Nephrops trawlers and were worth £6.3 million in 2016).

Summary

- Velvet crab and Lobster fisheries, adopt a similar approach to Crabs.
- Seek more research into the benefit of leaving berried lobsters in the water.
- Support V-notching of berried Lobsters
- Support status quo on Minimum Landing size for Velvet crab.

Scallops

Scallops are one of the largest single components of the shellfish value table, with a highly nomadic element, fishing across Area IV, VI & VII alongside vessels from the rest of the UK. Scallop landings peaked in 2012, and the landings in 2016, although down a third from that high, represented twice the amount landed in 1996.

In 2016, Scottish registered vessels landed 11,375T worth £27,764,000 into Scotland and 3,945T worth £9,170,000 into the rest of the UK. This represents 22% of the catch value of all Scottish vessels and a significant proportion of the entire UK Scallops landings.

The 2016 landings were made by approximately eighty over 10-metre boats, employing around 400 crewmen. The majority of these vessels are from the nomadic fleets of Kirkcudbright (which remains a major processing centre) and Oban. The scallop sector also includes approximately twenty under 10-metre vessels. It is estimated that 4% of production is attributable to 50 divers.

The main scallop grounds are found west of Kintyre, the North West, Shetland, and the Moray Firth and on the East coast of Scotland; these areas produce in excess of 80% of Scottish landings. The Scottish fleet is geographically diverse, a feature of the sector we need to recognise when considering appropriate management measures.

SSB, recruitment and catch rates were all identified as below average at the start of the decade, Advice from Marine Scotland Science at the time was that there should be no increase in fishing effort and measures should be considered to increase the SSB.

The survival rate of discarded scallops is high and therefore most undersized scallops returned to the sea have the potential to continue their growth this contributing to future recruitment and stock health.

Stock assessments have performed in English waters since 2017, and channel King Scallops are now included in the first round of Fisheries Improvement Plans (FIPs) under MSC guidelines. The second round of FIPs was launched in 2018 and includes Scottish King Scallops. Both the SFF and SWFPA are partners in the Scottish Scallops FIP. SFF policy on Scallops will be updated using the Bi-valve Working Group (BWG), which is expected to be in 2019.

The SFF BWG with input from Policy Officers and Association Secretaries will seek to assist the scallop industry in dealing liaising with Marine Scotland and other fisheries administrations. Due to the uniquely cross boundary activity of the fleet it is expected that the management requirements will be addressed in different forums including the Scallop Industry Consultative Group (SICG).

Environmental concerns with scallop dredging are routinely singled out for special mention by NGOs it should therefore be a priority to highlight best practice and positive initiatives in the sector.

The Scallop sector has been proactive in developing Codes of Conduct (COC) with static gear operators; these codes should continue in their evolution.

Members of associations in the Scallop Sector are encouraged to sign up to the Good Practice Guide (GPG) and the Responsible Fishing Scheme (RFS). Work is on-going to strengthen the stance of a proactive sector co-operating with a range of other stakeholders.

Summary

- SFF support for the GPG, COC's and SICG

- Support for innovation in gear technology.

Support for sensible, practical management regimes

- As far as possible maintain current fishing grounds.

- Ban on French dredge

General Management

1. Every effort should be made to ensure that shellfisheries do not become a quota species or fall further under the control of the European Union. In many cases, inclusion in the annual EU TAC process would disadvantage fishers.
2. Agreed management objectives and reference points should be established for shellfish stocks to guide sensible management regimes. These should include defining the stock area and its biology in terms of a cradle to grave timeline. It would also be appropriate to define the fishing effort on each stock.
3. A responsible approach taking local knowledge into account should be applied to stocks that are information poor and for developing fisheries. This should not, however, stifle diversification and development of new fisheries and operators within such fisheries should be encouraged to share information with scientists in a confidential manner.
4. Restrictive measures should not automatically be considered for stocks that have not previously been commercially exploited. This reduces the incentive for operators to share catch data and has the potential to stifle entrepreneurial enterprise.
5. It is essential that fisheries are considered as a whole, not artificially segmented according to fishing method, fishing area or port of landing.
6. Management measures introduced by IFGs should be negotiated with neighbouring IFGs in recognition of existing regulations applied to inshore and offshore vessels and stocks. This should come under the remit of IFMAC. Any introduction of restrictions on the size and power of vessels should consider the possibility of unforeseen consequences such as fishing displacement or safety.”
7. There needs to be consideration given to the management of shellfish licenses and other related entitlements to protect flexibility in the fleet, but try and avoid the problem of additional effort entering the shellfish fisheries.
8. A further review of national legislation applicable to shellfishery management should be carried out and recommendations for any amendments or additions should be made.

Science

9. More extensive science is needed within the majority of shellfisheries. The collection of biological data and the improvement in statistics relating to fisheries should be encouraged. SFF will continue to lobby Marine Scotland to fund science adequately.
10. Data provision should be a condition of any licence / permit system developed.
11. Marine Scotland Science should undertake a review of the science relating to specific shellfish species and any gaps in knowledge identified.
12. The design and implementation of assessment techniques better suited to shellfisheries should be encouraged.

Stock Conservation

13. V- Notching programmes should be encouraged for defined sections of the lobster population, dependent on the dynamics and needs of that specific fishery.
14. The release of juveniles and other methods of ranching shellfish, particularly lobster, should be supported, and clear scientific data from such schemes would support decision making.

15. The return of soft animals should be encouraged, but the return of cripples needs further investigation.
16. Minimum Landing Sizes for all species should be locally tailored, in compliance with national legislation, with sound scientific backing and agreed with stakeholders.
17. Consideration could be given to voluntary closed season for individual fisheries when quality and prices are low. Such closures should be area specific, ensuring that areas with high quality landings at that time will receive a premium for their landings.
18. Further area specific investigation into the effects of escape hatches for creels should be supported, as an unintended consequence of such hatches could mean that in some areas valuable by-catches could be lost.

Gear Conflict

19. In areas where gear conflict exists, inter and intra-sectoral communication and agreement are essential.
20. SFF members have always been keen to facilitate the development of area-specific Codes of Conduct to help eliminate gear conflict

Post Landing and Market Related Issues

21. Initiatives that improve traceability in the shellfish sector should be supported.
22. The provision of species specific training to improve quality and care of the catch should be encouraged and participation in such courses will be promoted by the SFF where possible.
23. Fishery accreditation is supported, in principle, while acknowledging that it may not be possible for all stocks to attain such certification.
24. The SFF will actively support shellfish-specific, market related initiatives led by Marine Scotland, Seafood Scotland, Seafish and, where appropriate, other agencies by contributing sectoral expertise to such processes.
25. The SFF will support efforts to enhance and improve the supply of information to the public on fishing practices and the health benefits of seafood. Figures throughout are from Scottish Sea Fisheries Statistics published by Marine Scotland.