



Fishing Industry Key Facts and Information

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1. Scallops

- ▶ In 2010, the UK fleet landed 42,700 tonnes of scallops, worth an estimated £54.4million, into UK ports (Marine Management Organisation statistics). Approximately 60% of UK landed scallops are exported to European countries, particularly France, where UK scallops are held in high regard.
- ▶ Over 98% of UK landed scallops are caught by vessels using towed fishing gear. There is a misconception that scallop fishermen tow dredges or trawls over every bit of the sea bed. In fact, fishermen know where the species are found and make rationale decisions about where to go scallop fishing.
- ▶ Scallops are a highly prized type of shellfish, of which there are more than 40 commercial species worldwide. The UK has two main commercial species: king (*Pecten maximus*) and queen (*Aequipecten opercularis*) scallops. These are either harvested from wild or cultivated at sea in nets suspended either in the water column or on the seabed.
- ▶ The principal environmental concern with fishing for scallops relates to some of the methods of harvest. Three are traditionally used: diving, trawling and dredging. Diving involves collecting scallops by hand from the seabed. Trawling – such as the summer trawl fishery for Manx queen scallops - is generally done on relatively smooth seabeds and results in relatively low seabed impact and low by-catches of other species such as fish. The third method is dredging. All types of dredging involve dragging some form of heavy metal frame along the seabed. These dredges may also have teeth which penetrate the surface of the seabed to dig out king scallops that burrow into the sediment.
- ▶ It is well known that scallop dredges can have a significant impact on the marine ecosystem. However, the severity and extent of the impact depends also on the nature of the seabed and the overlying water column. Just as with other forms of bottom-trawl, dredging may not necessarily be destructive if used in areas with ‘high energy’ seabeds (soft or sandy ones that naturally change all the time as a result of normal tide, current and wave action). The key consideration is the resilience of the habitat to scallop dredging. The faster the recovery rate of the animals and plants that live in the affected seabed, the more tolerant it will be to scallop dredging.
- ▶ Dredging must be done only with full understanding of the fisheries concerned, together with a practical application of mitigating measures. For instance, bottom imaging and seabed mapping technology can help to precisely target scallop beds and avoid other habitats and species. Changes in mesh size can increase selectivity, to allow juvenile scallops to escape, and changing the design of the gear may reduce its impact on the seabed environment. These are all active initiatives currently being pursued by Seafish together with the fishing industry.

- ▶ Further management measures may involve harvesting controls (such as closed seasons and effort limitation) plus longer term area closures to increase yield or protect the spawning stock. Particularly special and vulnerable habitats are protected through Marine Protection Areas, and are entirely closed to certain types of fishing.
- ▶ MSC has accredited dredged scallops in Shetland so they can be sustainably harvested in a manner that is sympathetic to the surrounding environment. The industry is working towards other accredited schemes including the Red Bag case study and MSC has also accredited the Isle of Man summery trawl fishery for queen scallops (www.fisheries-conservation.bangor.ac.uk).
- ▶ Dive-caught scallops are not a wholly practical alternative to traditionally-caught scallops as they could never fulfil consumer demand, representing as they do, only 3-5% of the current market, and even then only at the top end. What's more, divers can only operate in restricted depths due to limitations imposed by the physiology of diving.
- ▶ There are plenty of responsible hand-divers, but the practice is widely unregulated, and can therefore in its own rights cause problems. Hand-dived scallops should be sold through processors that routinely undertake sampling of scallops for toxins.
- ▶ Improvements in the management and approach taken with dredging need to be balanced with an increase in responsibility and accountability of hand-divers, with both taking into account their impacts on the environment. Seafish supports improved management in both sectors, as both have their place in providing food and maintaining a valuable export market for the UK.

For more information:

Seafish's Responsible Sourcing Guide for scallops:

http://www.seafish.org/media/publications/SeafishResponsibleSourcingGuide_Scallops_201301.pdf.

www.scallop-association.org.uk

2. MPAs / MCZs

- ▶ Seafish supports the concept of Marine Protected Areas (MPAs) which can play an important role in protecting the biodiversity and productivity of our seas.
- ▶ However, MPAs need to have clear and measurable objectives, as MPAs designed for fisheries management may be quite different to those designed to protect marine biodiversity. There could be some win-wins - for example where a habitat in need of protection also provides an important nursery area for a commercial fish species.
- ▶ The UK fishing industry can play an important role in understanding the marine environment and aid the development and management of MPAs. Our knowledge of the distribution of marine wildlife and their interaction with fishing is poor. Employing fishermen to gather marine data and collaborate on fishing impact and mitigation work will help us protect our seas whilst maintaining seafood production.
- ▶ International research on the effectiveness of MPAs has demonstrated the importance of engaging fishermen to better inform the process, to more effectively monitor MPAs and to assist in compliance. Seafish has developed an 'Environmental toolkit' to show how fishermen can participate.
- ▶ Marine Protected Areas (MPAs) are designated areas of oceans, seas and coasts where species and habitats are protected from activities that are damaging or cause disturbance. Fishing activities which do not have a significant impact on wildlife will be unaffected. Some fishing activities might need to be restricted in certain areas, but it may be possible to find wildlife-friendly ways to keep working.
- ▶ MPAs can be established for different reasons. Marine nature conservation MPAs are areas identified for biodiversity protection. They are used for nature conservation where their primary objectives relate to the conservation and recovery of marine wildlife and habitats. However, they may also benefit fish populations. More generally, the term 'Fisheries MPA' is used to describe a tool for fish stock management and recovery.
- ▶ It is essential that the creation of MPAs does not damage fishermen's jobs, fishing communities, fishing tradition and culture.
- ▶ Fishing will be restricted and, in some cases, banned within certain MPAs, leading to significant consequences for fishermen whose livelihood depends on the catch they land, and for the thousands of land-based industries associated with fishing. For that reason, it's imperative that fishermen are involved in the MPA decision-making process to ensure that the expertise of those who spend the majority of their lives at sea is used to inform any changes to current processes.

- ▶ European marine sites, designated to protect marine wildlife and habitats of European significance, such as eelgrass and reefs cover 24% of English territorial waters and Defra has begun a review of all fishing gear used in all sites and those deemed incompatible will be either banned or restricted. In addition to MPAs, there are many fishery closed areas in UK coastal waters to protect juvenile commercial species, such as cod and plaice as part of local fisheries management.
- ▶ In total, the area coverage of all UK Marine Protected Areas (including designated and candidate SACs, SPAs, MCZs, NTZs and MNRs) is currently >4 million hectares, which equates to more than 4% of UK waters. This will significantly rise following the designation of new MPAs under the UK and Scottish Marine Acts.
- ▶ In Scotland, 33 Nature Conservation MPA proposals have now been developed and a further four MPA search locations remain to be fully assessed. Were every one of these proposals taken forward for designation, the new MPAs would represent 12% of the area of Scotland's seas.

For more information:

www.seafish.org

Seafish environmental toolkit for assessing impact of MPA's:

<http://www.seafish.org/about-seafish/ukfen---uk-fisheries-economics-network/ukfen-ia-guidance->

Seafish environmental protection:

<http://www.seafish.org/media/sustainability/marine-protection>

Seafish Guide to MPAs:

http://www.seafish.org/media/754274/seafishguidetompas_201301.pdf

Seafish Guide to the environmental effects of towed gears:

http://www.seafish.org/media/754277/seafishguidetotowedgear_201301.pdf

UK Marine Protected Areas Centre:

<http://www.ukmpas.org/faq.html>

3. Discards

- ▶ Discards are those parts of the catch that are returned to the sea. By-catch are species in the catch that are not the main target of the fishery, but may be discarded. It is important to emphasise that discards are not a universal problem affecting all fisheries, and that the level of discarding varies widely between fisheries, and within fisheries.
- ▶ Seafish welcomes the recent vote in the European Parliament on CFP reform proposals which effectively provides a legal requirement to stop overfishing, ensures long-term management plans for every fishery through co-decision, and creates an obligation to land and record all catches of harvested and regulated species. These reforms will be introduced between 2014 and 2017.
- ▶ Implementing a discard ban does raise a number of issues, and dialogue with the fishing industry to play an integral role. We have to work together; we have to get smarter about how we manage quota; we have to improve selectivity; we must do more to quantify the level of discards for both commercial and non-commercial species; and we have to create a better evidence base of the survival rates of various species both post-escape (from the fishing gear) and post capture (discarded from the vessel). It is through the Seafish-facilitated Discard Action Group that we have started that dialogue.
- ▶ There are different reasons for discarding but the two major reasons are market conditions and management regulations. Both these sets of conditions can change by season or by fishing area, even within one fishery. It has been estimated that in European fisheries 1.7 million tonnes (of all species) are discarded annually, corresponding to 23% of total catches.
- ▶ The seriousness of the impacts related to bycatch and discards has been recognised by the international community and endorsed through the FAO International Guidelines on Bycatch Management and Reduction of Discards
- ▶ The current CFP regulation obliges fishermen to discard fish that they have caught in excess of their quota allocations or that are below the minimum landing size. These 'regulatory discards' are particularly a problem in mixed fisheries if the allocation of quota does not match the proportion of species in the catch.
- ▶ Encouraging fishers to use more selective gear is a critical part of addressing the discards problem. The fishing industry understands and acknowledges that discarding unwanted fish is a major issue affecting many fisheries and fishing methods but significant progress has been made towards reducing levels of discards. Seafish runs trawl gear technology training courses to familiarise fishermen with a range of methods to improve the selectivity of their trawls and reduce discards.

- ▶ The industry has worked collaboratively to explore means by which discarding can be reduced to the minimum practicable level. For example, Project 50%, was funded by Defra and co-ordinated by Cefas. The project used social scientists' skills to understand the reason behind apparent resistance to adopting new gear modifications. The trials were a resounding success, with average discards reductions of 52%, and the most successful boat achieving a 69% reduction.
- ▶ The industry will continue to work collaboratively to encourage dialogue, discussion and action on the issues caused by discards and to explore means by which discarding can be reduced to the minimum practicable level. The Seafish facilitated Discard Action Group (DAG) is a UK cross industry group that addresses the issues from all perspectives. DAG has a clear remit to provide factual information on discards and oversee the implementation of best practice on a national level.

For more information:

Seafish Guide to Discards, downloadable at:

http://www.seafish.org/media/742182/seafishguidetodiscards_201211.pdf

CFP reform:

<http://www.seafish.org/media/sustainability/protecting-fish-stocks/reform-of-the-cfp>

4. Environment / Sustainability

- ▶ A sustainable fishery is one in which fish stocks are being harvested in such a way that ecosystem productivity and the marine environment are sustained at the same time.
- ▶ It is fishermen who are at the forefront of fisheries management and the development of more responsible fishing methods. It is in the interests of the fishing industry to co-operate and collaborate with conservationists and fisheries scientists.
- ▶ Fisheries management has become more effective over the past ten years, because fisherman have become part of the decision making process, working with policy makers and scientists, to sustainably manage the marine environment.
- ▶ Sustainable fisheries will maintain fishermen's jobs, fishing communities, fishing tradition and culture, but there must be a balance between protecting the marine environment and providing seafood.
- ▶ Despite a huge amount of detailed information available, there is a tendency in the media to present generalised or sensational reports on the state of the world's fisheries. This selective interpretation of statistics can distort the true picture, misinform consumers and damage the industry's reputation. It is imperative that authoritative sources of information on fish stock levels are used, and members of the fishing industry are consulted to corroborate the accuracy of information before it is published or broadcast.
- ▶ The two most authoritative sources of information on world fish stocks are:
 - Food and Agriculture Organisation (FAO) of the United Nations
 - International Council for the Exploration of the Sea (ICES)
- ▶ An increasing number of fisheries around the world are meeting the Marine Stewardship Council (MSC) standard for sustainability. Over 172 fisheries are now certified by the MSC, and 100 more are currently undergoing the assessment process. 15,000 seafood products bear the blue MSC eco-label, meaning they can be traced back to certified sustainable fisheries.
- ▶ There are currently far fewer underexploited stocks than overexploited stocks but the picture is starting to stabilise and there are indications that improved management systems and better understanding of the dynamics of marine ecosystems are creating greater stability in world fisheries resources.

For more information:

Seafish Guide to Sustainability, downloadable at:

http://www.seafish.org/media/742167/seafishguidetosustainability_201211.pdf

Marine Stewardship Council:

www.msc.org

International Council for the Exploration of the Sea (ICES):

www.ices.dk

Food and Agriculture Organisation (FAO) of the United Nations:

www.fao.org

5. Economics

- ▶ Seafood is a multi-billion pound industry in the UK. Four out of five house-holds consume seafood at least once a month and around £5.6 billion was spent on purchases of seafood in the UK in 2011. (Neilson)
- ▶ The UK imports most of the seafood we eat. In 2011, a total of 718,000 tonnes of seafood costing around £2.6 billion was imported into the UK. (Neilson)
- ▶ Seafood is also an important export commodity for the UK. In 2011, just over 435,000 tonnes of seafood at a value of around £1.5 billion was exported from the UK. (HMRC)
- ▶ The UK fleet has increased its quantity and value of fish landed. In 2011, the UK fishing fleet landed around 600,000 tonnes of seafood at home and abroad, for a total of £830 million. (MMO figures)
- ▶ The UK fleet has become more productive over the last decade. The number of fishermen has fallen while the amount and value of seafood landed has gone up. (MMO figures)
- ▶ Owners of UK fishing businesses are responsive to the stringent rules and regulations implemented by industry. Some of the rules about access to fishing create obligations or incentives to act in a way which is rational for their business but not ideal for the long term sustainable harvest of our valuable fish stocks. These issues are being addressed by industry and government working together to identify workable solutions. (Seafish)

For more information:

UKFEN (UK Fisheries Economic Network):

<http://www.seafish.org/fishermen/ukfen---uk-fisheries-economics-network>

6. Social

- ▶ Fish is food, and a vital part of a global food supply system. With a global population of around 7 billion rising daily, 20% of whom derive a fifth of their protein from fish, there is a need to balance societal needs for food with the realities of the environmental impact of fishing.
- ▶ Fish provides more than 4.3 billion people with about 15% of their intake of animal protein, and UK fishing industry plays a pivotal role in the provision of this.
- ▶ The industry is focused on securing its continuing prosperity by maintaining a marine environment which can generate a sustainable source of high quality protein and healthy food for the world's nations.
- ▶ There has been a slow but steady reduction in numbers of fishermen over the last decade. Fishing in the UK employed around 12,400 people in 2011, down by 17% since 2001. (MMO)
- ▶ There has been a steady reduction in number of jobs in the fish processing industry. There were around 22,000 FTE jobs in 2000 and in 2012 there were around 12,000 FTE jobs. (Seafish)
- ▶ The seafood industry is often more important to local economies than it is to the national economy as a whole. The proportion of jobs in various sectors of the seafood industry are concentrated in coastal communities making them more dependent on seafood than the UK as a whole.
- ▶ Fishing can provide valuable part-time and seasonal employment in fragile coastal economies where full-time jobs are more scarce.

For more information:

www.seafish.org

7. Mackerel

- ▶ There is an ongoing dispute regarding the fishing of mackerel in the North East Atlantic (NEA) amongst the Coastal States. The current crisis erupted in 2009 after the Faroe Islands withdrew from the mackerel management agreement in response to Iceland's increasing mackerel catch. The level of autonomous quotas set by both Iceland and the Faeroe Islands since have been strongly challenged by both the EU and Norway.
- ▶ Currently every effort is being made to resolve this issue through formal negotiation at international level, so that mackerel management can be re-established and the stock sustainably fished at levels which will not compromise long-term resource productivity.
- ▶ Mackerel is the most valuable stock to the Scottish fishing industry, representing about one third of the value of total landings by the Scottish fleet. There have been strong protests by Scottish fishermen at the continuing situation – including blockades at Scottish ports to prevent Faeroese vessels from landing mackerel.
- ▶ It is important to recognise that science and the fishing industry are in agreement that stocks of mackerel are plentiful. What we are all looking at though is the future of the stock and the cautionary advice now being received from some certification bodies if the dispute about the north Atlantic quota remains unresolved. The UK industry and supply chain is fully switched on to the issue and has a good recent track record of working with environmental organisations to provide the best advice to consumers. That advice as it stands is that we can continue eating mackerel, albeit it with a greater awareness of the issues surrounding it, and due political process will find a solution in time to quotas.

For more information:

Seafish mackerel industry guidance note February 2013:

http://www.seafish.org/media/755123/seafishguidancenote_mackerel_201301.pdf

8. Warm-water prawns

- ▶ Warm water prawns are located in tropical marine areas. Total world production of penaeid shrimps and prawns averaged 4.13 million tonnes per annum for the years 2007-9. Of these 3.4 million tonnes or 82.3% were produced by aquaculture, predominantly from inland (brackish water) locations. China, Thailand, Indonesia and Vietnam dominate production of warm water prawns.
- ▶ The majority of supplies of warm water prawns to the UK are farmed. This is due to the consistent quality, size and predictability of supply, all of which are characteristics that buyers insist on.
- ▶ Both environmental and economic pressures support the need for management standards and the certification of aquaculture production. Most of the leading UK retailers look for independent certification of warm water prawns, or source from independently certified sources, and they publish their sourcing policies online.
- ▶ There are environmental and social issues that could relate to prawn production, but there are measures available to counter any negative aspects, and there is a strict legal system for importing prawns into the UK with stringent testing requirements to ensure all product is free from drug and chemical residues.
- ▶ Warm water prawns are an extremely good source of protein, yet are very low in fat and calories, making them a very healthy food choice. They are also considered a healthy option because they contain high levels of Omega-3 fatty acids and are rich in Vitamins E and B12, phosphorous and selenium

For more information:

Seafish's Responsible Sourcing Guide for warm-water prawns:

http://www.seafish.org/media/756799/seafishresponsiblesourcingguide_warmwaterprawns_201301.pdf