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1. SCALLOPS

→ In 2012, the UK fleet landed 53,300 tonnes of scallops, worth an estimated £66.9 million, 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 seabed. In fact, fishermen know where the species are found and make considered 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 in the main harvested, with a very small amount being cultivated at sea in nets suspended 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 seafloor 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 (MPAs), and are entirely closed to certain types of fishing.

The Marine Stewardship Council (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 has MSC-accredited trawl fisheries for Queen scallops in the Isle of Man and is working toward accreditation in a number of other areas of scallop fishing.

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 to 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 cause problems such as over-exploitation of stocks. 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.
2. MPAs

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.

Seafish supports the concept of 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.

It is wise that in the creation of MPA’s that social, economic and environmental considerations are taken into account. Fishermen have a vital role to play in helping establish and manage these areas based on clear objectives.

There are several types of MPA. Nature conservation MPAs are for biodiversity protection. Fisheries MPA’s are where natural populations of commercial species are protected either in part or completely from further exploitation. In the case of the latter, UK fishermen have an important role to play in providing evidence for, and management expertise in, achieving the objectives of those MPA’s.
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.

The European Parliaments CFP reform proposals, which effectively provide a legal requirement to stop over fishing, 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.

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 by-catch 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.

Seafish has published a report titled ‘A case study review of the proposed CFP landings obligation’ which looks at the potential economic implications of the introduction to the landings obligations on selected UK fishing fleets.
The industry has worked collaboratively to explore means by which discarding can be reduced to the minimum practicable level. One such example is Project 50% which 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.

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 one where target fish populations are judged to be at healthy levels (this can be the case even if they are ‘recovering’ from having been depleted in the past) and will be viable for the foreseeable future.

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 10 years, because fishermen have become part of the decision-making process, working with policy makers and scientists, to sustainably manage the marine environment.

Sustainable fisheries help 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, generalised or sensational reports on the state of the world’s fisheries are often reported as fact. This selective interpretation of statistics can distort the true picture, misinform consumers and damage the industry’s reputation, often unfairly. Over the past decade the seafood industry has taken significant steps to improve its environmental performance across all areas of fisheries management and this is starting to pay dividends for stock status and the sustainability of the UK seafood industry as a whole.
5. ECONOMICS

Seafood is a multi-billion pound industry in the UK. Four out of five households consume seafood at least once a month and around £6.2 billion was spent on purchases of seafood in the UK in 2012. (Neilson)

The UK imports most of the seafood we eat. In 2012, a total of 752,000 tonnes of seafood costing around £2.56 billion was imported into the UK. (Neilson)

Seafood is also an important export commodity for the UK. In 2012, just over 470,000 tonnes of seafood at a value of around £1.35 billion was exported from the UK. (BTS)

In 2012, the UK fishing fleet landed around 627,000 tonnes of seafood at home and abroad, for a total value of £770 million. (MMO figures)

Owners of UK fishing businesses are responsive to the stringent rules and regulations implemented by government. 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 seafood stocks. These issues are being addressed by industry and government working together to identify workable solutions. (Seafish)
6. SOCIAL

- Fish is food, and a vital part of a global food supply system. With a global population of around seven 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.

- Seafood 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 12,450 people in 2012, down by 12% since 2002. (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.