

The Use Made of Scottish Sea Fisheries Statistics

(This expands on the short summary of uses given in [Scottish Sea Fisheries 2016, Annex 1 – Methodology](#)).

In response to the UK Statistics Authority's (UKSA) Assessment of the Scottish Sea Fisheries Statistics for compliance with the Code of Practice for Official Statistics, the statistics team within the Marine Analytical Unit was required to identify and document the ways in which these statistics are used.

The purpose of this document is to provide an inventory of the uses made of Scottish Sea Fisheries Statistics inside and outside Government. The list can not be exhaustive but aims to be indicative of the uses made. This inventory documents uses that have been brought to our attention through ad-hoc data requests; from examples provided by users on a voluntary basis and through feedback received from users of the Scottish Sea Fisheries Statistics. The classification of uses listed below are those suggested by the UKSA in their Monitoring Brief 6/2010 'The Use Made of official Statistics'. The ordering of the uses reflect their relative importance for Scottish Sea Fisheries Statistics.

Official statistics are a tool used in decision making both inside and outside government, and for this tool to be effective it must be designed to meet the needs of users. If you have any contributions to this inventory to improve our knowledge of the ways in which Scottish Sea Fisheries Statistics are used, they are very welcome. Please provide any comments on the uses you have made of these statistics and any suggestions for their improvement to fisheriesstatistics@scotland.gsi.gov.uk

- 1. "ii. Government decision making about policies, and associated decisions about related programmes and projects including;**
 - a) policy making**
 - b) policy monitoring**
 - c) policy delivery** (a use not listed in the Monitoring Brief but relevant for Scottish Sea Fisheries Statistics)."

Scottish Sea Fisheries Statistics provides an overview of the fishing industry. The Scottish Government uses this information at a macro-level to assess the value of sea fishing to Scotland and to monitor trends over time in the number of fishing vessels and numbers of fishermen employed in Scotland.

a) Policy making.

Scottish Sea Fisheries Statistics are routinely used to support annual negotiations of fish stock allocations (fish quotas) with the European Commission and Norway – not an EU member - to secure fishing opportunities for Scotland. Scottish Sea Fisheries Statistics are used to provide information on the percentage uptake of quota and the value of fish stocks to Scottish fishermen. Scottish Sea Fisheries Statistics are also incorporated in the scientific

advice provided by Marine Scotland Science to support these negotiations (see 'facilitating academic research' section for further detail). Policy colleagues use this information as the evidence base for negotiations of quota shares.

A specific example where Scottish Sea Fisheries Statistics have been used in policy development is the Cod Catch Quota Scheme (CCQS). The CCQS is a voluntary scheme where participating vessels must retain on board and land all cod that is caught, regardless of size and marketability. The aim of the scheme is to achieve control over total removals from the sea and not just landings, so as to reduce discards and cap mortality with the ethos of "land more, catch less". Scottish Sea Fisheries Statistics were used to determine the quantity and value of landings by vessels participating in a pilot scheme compared with non-participating vessels. Combined with further data these statistics were used in an initial economic analysis of the scheme that quantified the financial impact (net fishing revenue and operating costs) on participating skippers. This economic analysis has been considered in the revision and extension of the CCQS in subsequent years.

Scottish Sea Fisheries Statistics have also been used on a micro-level in recent developments in fisheries management of inshore waters (within 12 nautical miles off Scotland's coast). For example, Luce Bay and Sands, in the south west of Scotland, was designated as a Special Area of Conservation (SAC) in 2005 due to the presence of a number of species and habitat features of European importance. In addition, Luce Bay has a number of significant fisheries, including whelks, lobsters and scallops, and is also an important location for recreational sea angling. Scottish Sea Fisheries Statistics were used at a local level to analyse what and where fishing activity was taking place in Luce Bay. These statistics were used to inform and develop a management plan for Luce Bay and Sands to strike a fair balance between competing demands of securing the future of the Bay's special features and maintaining the livelihoods of fishermen and fishing communities.

b) Policy monitoring.

The statistics team in the Marine Analytical unit perform ongoing monitoring of sea fishing activity, against European Commission quotas and effort limits. Quotas are limits on the amount of fish of different species that can be caught from specified sea areas while effort is a limit on the time that vessels spend at sea. Monitoring of quota and effort is based on management information, figures that represent the data held in the sea fisheries management information systems at the time of the data extraction, (note these figures are therefore incomplete and have not undergone the quality assurance procedures necessary for National Statistics).

c) Policy delivery(a use not listed in the Monitoring Brief but relevant for Scottish Sea Fisheries Statistics).

Routine data analysis is performed for the delivery of the real-time area closure scheme. This scheme introduced in September 2007, is a voluntary system of real-time area closures which acts as a fisheries management tool to protect concentrations of cod. Areas of fishing

grounds are closed for a fixed period where a high abundance of cod has been identified by analysis of landing data and vessel position data.

2. “iii. Resource allocation – typically by central and local government.”

The allocation of quota stock to fish producer organisations (POs) are based on the PO member vessels' previous fishing activity or "track record" known as Fixed Quota Allocation (FQA) units. Determination of these FQA units will have been based on historical Scottish Sea Fisheries Statistics.

Scottish Sea Fisheries Statistics, particularly fleet statistics were utilised by the Fleet Resilience Grant Scheme in 2010. This scheme addressed the situation in which the need to pay for the on-going maintenance or disposal of the donor vessel meant that owners would not be in a sufficiently strong financial position to utilise the Licence Parking arrangements. The concept of 'Licence Parking' was that, by allowing multiple existing fishing licenses to be placed on a fishing vessel, some businesses may be able to reduce their fixed and variable costs (such as harbour dues, insurance, repairs and other owner expenses) by sharing a vessel, thus generating sufficient operating profit to be financially viable over the short and long term. Alternately, in fisheries severely constrained by quota and effort licence Parking may allow vessels to access additional effort by buying out those who wish to leave the industry and concentrating effort on the remaining vessels, an approach that was not permitted by licensing rules. A total fund of £8m (including Scottish Government and European Fisheries Fund funding) was set aside to support this policy.

Scottish Sea Fisheries Statistics are used to check facts and provide factual information for the assessment of applications for European Fisheries Fund (EFF) funding. The EFF programme aims to assist with capital investment in the aquaculture, fishing and fish processing industries. The programme can also support strategic trade initiatives, fisheries dependent communities and Scottish Government and European Community policy initiatives for the sustainable development of fisheries. In 2011 Scotland secured an allocation of approximately €23.49 million for the Highlands and Islands and around €75.04 million for the rest of Scotland, (The sterling value of the programme varies according to the euro exchange rate).

Feedback received on our 2010 publication from Aberdeenshire council highlights that Scottish Sea Fisheries Statistics are used to assess funding applications at a local government level.

3. “vii. Facilitating academic research.”

Scottish Sea Fisheries Statistics are routinely supplied to Marine Scotland Science (MSS) to facilitate research required to support fisheries management. Each year scientific work is undertaken at MSS to understand the biology and the state of commercially important fish stocks. Along with equivalent work by other members of the International Council for the Exploration of the Sea (ICES), scientist look at the changes in the state of fish stocks and

forecast what is likely to happen in the future. This work forms the basis of stock assessment which provides fishery managers, the Government and the European Commission, with information to inform decisions on exploitation rates to sustain fish stocks and the management actions necessary to achieve the sustainable supply of fish.

Scottish Sea Fisheries Statistics are regularly supplied to academics for research in monitoring and commenting on changes in fishing patterns. Institutions that have recently requested data include Heriot-Watt University and the University of the Highlands and Islands.

4. “iv. Informing private sector commercial choices; targeting local markets, targeting households and individuals and designing market research surveys.”

Scottish Sea Fisheries Statistics and associated management data is used by Seafish, an organisation that promotes sustainable seafood, to develop a model of the profitability of the UK fishing fleet, and undertake other economic analyses of the fishing fleet. This modelling output, performed under contract for Marine Scotland and the other UK Fisheries Administrations, is made available to the fishing industry to help increase profits by encouraging increased efficiency and maximisation the price obtained for fish

Scottish Sea Fisheries Statistics are also frequently used by energy consultants (e.g. Xodus Group and BMT Cordah Ltd.) on a micro-level to examine sea fishing activity in small areas of the sea as input to environmental impact assessments for offshore energy (oil, gas and renewable) developments.

5. “i. Informing the general public’s choices;

a) about investment decisions,

b) about service providers,

c) about lifestyle choices,

d) about the state of the economy, society and the environment,

e) about the performance of government and public bodies.”

The headline figures in terms of the value of sea fish landings, fleet size and employment numbers provided by Scottish Sea Fisheries Statistics inform the public of the value of sea fishing at the Scottish level. These headline figures are routinely reported in the national press following publication of the Scottish Sea Fisheries Statistics, for example the BBC’s article reporting the figures within Scottish Sea Fisheries Statistics 2010;

<http://www.bbc.co.uk/news/uk-scotland-north-east-orkney-shetland-14928228>

d) About the state of the economy, society and the environment.

Scottish Sea Fisheries Statistics were utilised within Scotland’s Marine Atlas which provides information about Scotland’s seas through a colourful presentation of maps and graphics to inform and educate people about the state of the marine environment and marine issues in general. The Atlas includes in-depth information to support the new marine planning

framework and provides an assessment of the current state of Scotland's seas. The Atlas can be found at: <http://scotland.gov.uk/Topics/marine/science/atlas>

e) About the performance of government and public bodies.

Scottish Sea Fisheries Statistics are used to inform the Scotland Performs National Indicator #44 on fish stock sustainability. Scotland Performs measures and reports on progress of the Scottish Government against its Purpose; to create a more successful country, with opportunities for all to flourish through increasing sustainable economic growth. Scotland Performs offers accountability for the citizen to monitor for themselves government policies and operational effectiveness. Further information on the fish stock sustainability indicator can be found at; <http://www.scotland.gov.uk/About/scotPerforms/indicators/fishStocks>

It should be noted that Scottish Sea Fisheries Statistics are esoteric in nature and have limited direct use to the public in informing investment decisions, service providers or lifestyle choices. .

6. “ Informing Parliamentary decision making (a use not listed in the Monitoring Brief but relevant for Scottish Sea Fisheries Statistics).”

Scottish Sea Fisheries Statistics publications are made readily available to the Scottish Parliament Information Centre (the parliament’s library), where they are used in research briefings prepared by the Scottish Parliament Information Centre (SPICe) for members of the Rural Affairs and Environment Committee; a group of MSPs (Members of the Scottish Parliament) with a remit to conduct inquiries, scrutinize legislation and hold the government to account on agriculture, fisheries, and rural development.

Scottish Sea Fisheries Statistics are also used to answer parliamentary questions when members of the parliament ask questions of government ministers which they are obliged to answer.

7. “v. Informing public marketing campaigns.”

Scottish Sea Fisheries Statistics are used by Seafish and SeaFood Scotland, organisations that promote sustainable seafood, to support promotional campaigns for fisheries products to raise consumer awareness and encourage the consumption of seafood.

Scottish Sea Fisheries Statistics are also used in independent sustainability certification schemes such as the Marine Stewardship Council's (MSC) and the Responsible Fishing Scheme that are useful tool in helping consumers decide which sources to buy their food from. The MSC blue eco-label provides assurance that the product comes from a sustainable fishery.

8. “vi. Supporting third sector activity; lobbying and funding applications.”

Scottish Sea Fisheries Statistics are used by the Scottish Fishermen's Federation (SFF) in their role of advancing the interests of Scottish fishermen at national and international levels by lobbying government officials in Edinburgh, London and Brussels.

Scottish Sea Fisheries Statistics have been used by the Community of Arran Seabed Trust (COAST), a not for profit voluntary community group which recognises and values the marine biodiversity and the need to protect it for future generations. Recent activities include contributions to the development of national legislation, especially the implementation of Scotland's first 'no take zone' (NTZ) in Lamlash Bay, Isle of Arran. The NTZ is an area of the sea and seabed from which no marine life can be removed by any method. It is COAST's vision that this will protect seabed habitats, regenerate fish and scallop populations and enhance the marine biodiversity of Lamlash Bay.

9. Contributing to International Statistical Publications (a use not listed in the Monitoring Brief but relevant for Scottish Sea Fisheries Statistics).”

A range of Sea Fisheries Statistics and associated management information are provided to our UK government counterparts, the Marine Management Organisation who send catch data for the whole of the UK, to Eurostat and the Directorate-General for Maritime Affairs and Fisheries. These statistics are incorporated in the international statistics publication Fisheries Statistics – Data 1995 – 2008, which can be found at;

http://epp.eurostat.ec.europa.eu/portal/page/portal/product_details/publication?p_product_code=KS-DW-09-001

Eurostat and this publication permit European comparisons to be drawn across member states.