

RELEVANT INFO

- **A fair and sustainable fisheries bill: NEF priorities...** <http://neweconomics.org/2018/05/fair-sustainable-fisheries-bill/>
 - An explicit requirement for 'ecosystem-based fisheries management', as part of a joined-up approach across all policy to ensuring the health of the sea
 - A new 'quota reserve' system: this would set aside a percentage of quota (especially any new quota that comes the UK's way after Brexit), and allocate it as an incentive to deliver on public goods – environmental and social goals – and helping new, low-impact fishers establish themselves in the industry.
 - A process of 'quota reallocation', ensuring that those fishers currently left out of the system receive a quota share that is both fair and viable. The Bill should also expand the geographical remit of Inshore Fisheries and Conservation Authorities (IFCAs) from the current 6 miles to 12, to allow for local solutions to unique environmental challenges along our coast.
 - A review of the support available for the industry and institute a new 'landings tax' for fisheries management, differentiated to incentivise boats to land in UK ports.
 - <http://neweconomics.org/wp-content/uploads/2018/05/1804-A-Fair-and-Sustainable-Fisheries-Bill-NEF1.pdf>
- [UK fisheries are losing out on up to £62m per year as catering firms go overseas to purchase sustainable fish, according to new research.](#)
- **Economic Impacts of Scenarios for Scottish and UK Seafood Industries Post EU Exit: Scottish Government Policy Brief**
 - The report presents findings from research examining the possible impacts of EU exit on Scottish and UK seafood industries, using a range of hypothetical scenarios reflecting changes in three drivers of international trade in seafood: tariffs; non-tariff measures; and production levels as determined by fishing quotas for wild capture fisheries.
 - The research findings suggest that Scottish and UK seafood output would benefit from continued free trade. The introduction of tariffs and non-tariff measures relative to the status quo would have negative impacts on both UK and EU output and trade flows. It also found that any potential benefits from increased fishing quotas would reduce with increasing tariff and non-tariff measures once the UK leaves the European Single Market and the Customs Union.
<http://www.gov.scot/Publications/2018/06/3865>
<http://www.gov.scot/Resource/0053/00536121.pdf>
- Fishing into the future: guidelines for industry-science data collection published: http://www.fishingintothefuture.co.uk/wp-content/uploads/2017/06/WP2-Data-Protocols-Guidance_FINAL-CLEAN.pdf
- Facts and figures of the CFP https://ec.europa.eu/fisheries/documentation/publications_en
- [STECF Monitoring the performance of the Common Fisheries Policy](#)
- Seafish [ACIG presentations now online](#)
- Seafish RASS aquaculture profiles <http://seafish.org/aquacultureprofiles/>

EVENTS

- **MCS** feedback on ratings system requested <https://www.mcsuk.org/responsible-seafood/about-our-ratings>
- [IFM 49th Annual Conference. Call for Papers:](#) 'Thriving or Surviving – Creating Resilient Fisheries. October 16th – 18th 2018. The Guildhall, Hull, England
- [Upcoming NEF Consulting training events:](#)

PUBLICATIONS

- **A valuation of the Provisioning Ecosystem Services provided by shellfish for priority shellfish waters in the Solent.**
This research aims to describe and value the socio-economic and environmental benefits of improving water quality for shellfish waters in the Solent (e.g. by reducing the amount of faecal contamination). An ecosystem services framework is used to model changes in relation to shellfish provisioning services, valued in terms of direct and indirect Gross Value Added (GVA). By presenting a narrative on the wider value and ecosystem services provided by shellfish beds, and modelling the benefits of water quality improvements for the provisioning services of shellfish beds, it is possible to demonstrate the worth of investing in better water quality and shellfish productivity, to obtain wider societal benefits.

The five priority waters considered for this study are:

- Portsmouth Harbour
- Langstone Harbour
- Southampton Water
- Approaches to Southampton Water
- Central Solent (Hill Head)

The four priority shellfish species considered for this study are:

- Manila clams (*Venerupis philippinarum* syn. *Ruditapes philippinarum*)ⁱⁱⁱ
- Hard-shell clams (*Mercenaria mercenaria*)
- Cockles (*Cerastoderma edule*)
- Native oyster (*Ostrea edulis*)

Due to the growing recognition of the ecosystem services provided by suspension-feeding bivalves (such as clams, cockles and oysters), estuarine restoration projects supporting natural remediation (including water clarity improvements, reduction of nutrient loading / eutrophication, filtration, and buffering against algal blooms) can notably improve water quality and enhance the resilience of estuarine ecosystems.

https://www.researchgate.net/publication/325058339_A_valuation_of_the_Provisioning_Ecosystem_Services_provided_by_shellfish_for_priority_shellfish_waters_in_the_Solent#share

- **Replicated marine protected areas (MPAs) support movement of larger, but not more, European lobsters to neighbouring fished areas**
The European lobster *Homarus gammarus* is heavily exploited in the Norwegian fishery, and several management actions have been implemented to protect the species. Three marine protected areas (MPAs) excluding all but hook and line type fishing gear were established along the Skagerrak coast in 2006, effectively banning the trap-based fishery for European lobster. Lobster populations within MPAs and adjacent control areas were studied by capture-mark-recapture and recovery methods every year from prior to MPA establishment to the present.

During 2006-2014, a total of 4682 and 3317 lobsters were captured (including recaptures) in the MPAs and control areas, respectively. In all MPAs, protection led to a shift in demography, with an increase in mean total length of 15% during 2006-2014, thereby opposing the effects of a size-selective fishery. No difference was found in rates of movement out from MPAs and control areas, but lobsters moving from MPAs and caught in fished areas were significantly larger than lobsters moving out of control areas. In instances where lobsters tagged in a control area moved into an MPA, the immigrating lobsters had a larger body size than the mean in their area of origin. The range of movement undertaken by recovered lobsters extended beyond the home range sizes suggested by previous shorter-term studies, and well beyond the sizes of the small coastal MPAs studied herein. In summary, demographic changes should be accounted for when interpreting the value of spillover from MPAs, and also potential 'spill in' from fished areas to MPAs.

<http://www.int-res.com/abstracts/meps/v595/p123-133/>

- **To land or not to land: How do stakeholders perceive the zero discard policy in European small-scale fisheries?**

The landing obligation recently adopted by the European Union's (EU) Common Fisheries Policy aims to eradicate discards in EU fisheries. The objective of this paper is to investigate the potential social and economic impacts of the discard ban in European small-scale fisheries (SSF) and the critical factors for its successful implementation. An exhaustive systematic literature review and a stakeholder consultation were carried out in order to (i) collect detailed information about current knowledge on discards in EU SSF and gauge stakeholder perceptions about potential impacts of the discard ban in European SSF, (ii) examine the capacity of the SSF industry to implement the discard ban, and (iii) explore the limits and feasibility of implementing such a measure. The results of this study show that little attention has been given by the scientific community to discards in EU SSF. Indeed, the systematic literature review shows that this problem is relatively unexplored in the EU. In addition, the effectiveness of a discard ban in industrial fisheries is still unclear, mainly because discard data are not systematically collected by fisheries authorities. Stakeholders mostly perceive that the new landing obligation was developed with industrial fisheries in mind and that compliance with the landing obligation in EU SSF will be difficult to achieve without high economic costs, such as those related to the handling and storage of unwanted fish on board.

<https://www.sciencedirect.com/science/article/pii/S0308597X16302780>

- **Fish reproductive-energy output increases disproportionately with body size**

Body size determines total reproductive-energy output. Most theories assume reproductive output is a fixed proportion of size, with respect to mass, but formal macroecological tests are lacking. Management based on that assumption risks underestimating the contribution of larger mothers to replenishment, hindering sustainable harvesting. We test this assumption in marine fishes with a phylogenetically controlled meta-analysis of the intraspecific mass scaling of reproductive-energy output. We show that larger mothers reproduce disproportionately more than smaller mothers in not only fecundity but also total reproductive energy. Our results reset much of the theory on how reproduction scales with size and suggest that larger mothers contribute disproportionately to population replenishment. Global change and overharvesting cause fish sizes to decline; our results provide quantitative estimates of how these declines affect fisheries and ecosystem-level productivity

<http://science.sciencemag.org/content/360/6389/642>

- **Mapping nearly a century and a half of global marine fishing: 1869–2015**

Understanding global fisheries patterns contributes significantly to their management. By combining harmonized unmapped data sources with maps from satellite tracking data, regional tuna management organisations, the ranges of fished taxa, the access of fleets and the logistics of associated fishing gears the expansion and intensification of marine fisheries for nearly a century and half (1869–2015) is illustrated. Estimates of industrial, non-industrial reported, illegal/unreported (IUU) and discards reveal changes in country dominance, catch composition and fishing gear use. Catch of industrial and non-industrial marine fishing by year, fishing country, taxa and gear by 30-min spatial cell broken to reported, IUU and discards is available. Results show a historical increase in bottom trawl with corresponding reduction in the landings from seines. Though diverse, global landings are now dominated by demersal and small pelagic species.

<https://www.sciencedirect.com/science/article/pii/S0308597X18300605>

- **The economics of fishing the high seas**

While the ecological impacts of fishing the waters beyond national jurisdiction (the “high seas”) have been widely studied, the economic rationale is more difficult to ascertain because of scarce data on the costs and revenues of the fleets that fish there. Newly compiled satellite data and machine learning now allow us to track individual fishing vessels on the high seas in near real time. These technological advances help us quantify high-seas fishing effort, costs, and benefits, and assess whether, where, and when high-seas fishing makes economic sense. We characterize the global high-seas fishing fleet and report the economic benefits of fishing the high seas globally, nationally, and at the scale of individual fleets. Our results suggest that fishing at the current scale is enabled by large government subsidies, without which as much as 54% of the present high-seas fishing grounds would be unprofitable at current fishing rates. The patterns of fishing profitability vary widely between countries, types of fishing, and distance to port. Deep-sea bottom trawling often produces net economic benefits only thanks to subsidies, and much fishing by the world’s largest fishing fleets would largely be unprofitable without subsidies and low labor costs. These results support recent calls for subsidy and fishery management reforms on the high seas.

<http://advances.sciencemag.org/content/4/6/eaat2504>

- **Preparing ocean governance for species on the move**

The ocean is a critical source of nutrition for billions of people, with potential to yield further food, profits, and employment in the future (1). But fisheries face a serious new challenge as climate change drives the ocean to conditions not experienced historically. Local, national, regional, and international fisheries are substantially underprepared for geographic shifts in marine animals driven by climate change over the coming decades. Fish and other animals have already shifted into new territory at a rate averaging 70 km per decade (2), and these shifts are expected to continue or accelerate (3). We show here that many species will likely shift across national and other political boundaries in the coming decades, creating the potential for conflict over newly shared resources.

<http://science.sciencemag.org/content/360/6394/1189>

UPDATE ON MSEP

- **BLUE NEW DEAL Action Plan** – [‘Turning back to the sea’](#)
- **MSEP legacy:** [A marine economics handbook for NGOs](#)
- **The Infographic Impact Assessment for MCZs** <http://www.mseproject.net/infographic-ia>
- **Poole Rocks MCZ-** www.poolerocksmcz.uk <https://www.youtube.com/watch?v=68dly3ofgMU>
- **NEF [Economics in policy making briefings](#)**
- **NEF ‘A fair fishing deal’** http://neweconomics.org/2017/09/fish/?_sft_latest=research
- Find out more about **NEFs work with the fishing community in Eastbourne.** [Film here](#)

OVER TO YOU

- **Follow the MSEP on twitter** @MarineEconomics
- If you have any research, articles or information that relates to socio-economic studies in the marine environment please share them with the network

Thanks, Chris @ NEF