

Recommendations to the UK Government on the setting of fishing opportunities for Northeast Atlantic fish stocks for 2021

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2020 is a unique year and one where the UK Government needs to show leadership as we enter a new era of independent fisheries management outside the European Union. In this context we – ClientEarth, Marine Conservation Society and Oceana – wish to present our recommendations on the setting of Northeast Atlantic fishing opportunities for 2021. It is our hope that these will assist the UK Government in making decisions on fishing opportunities that significantly contribute to restoring and maintaining fish stocks above healthy levels.

Despite some progress made during past years towards delivering sustainable fisheries, the binding EU 2020 deadline for ending overfishing¹ has been missed² and UK waters remain among the most heavily exploited in the world. The requirement to end overfishing for all stocks is also an integral component of the United Nations Convention on the Law of the Sea (UNCLOS), the Convention on Biodiversity (CBD) and the United Nations Sustainable Development Goal (SDG) 14. This situation is also preventing the achievement of Good Environmental Status (GES) indicators required by the Marine Strategy Regulations 2010, as the UK is failing all but four of the fifteen indicators, including all the indicators related to commercial fisheries.³

Within the UK's exclusive economic zone (EEZ) are some of the most productive fishing grounds in the Northeast Atlantic and 2021 marks the first time in over 40 years that the UK will have the exclusive responsibility of managing its fisheries resources as an independent coastal state. The UK Government has stated its commitment to becoming a “world leader” with “gold standard fisheries management” following its departure from the EU.⁴ It is vital the government deliver on this claim, and ensure fishing opportunities set for 2021 do not exceed scientific recommendations, thus finally ending overfishing. This will also result in the UK meeting its commitments under international law and contribute to the development of sustainable fisheries, healthy marine ecosystems and prosperous fishing fleets and coastal communities.

We note that where decisions have been made in the past to follow the scientific advice provided by International Council for the Exploration of the Sea (ICES), stock health has improved to the benefit of both the marine environment and fishing communities. There are several reports that indicate that

¹ EU, 2013. Article 2.2. of the Common Fisheries Policy. Available at: <https://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:32013R1380&from=EN> [Last accessed, 08.09.2020]

² PEW, 2019. Pew Charitable Trusts analyses of Fisheries Council agreements on fishing opportunities for deep-sea stocks for 2019 and 2020. Available at: https://www.pewtrusts.org/-/media/assets/2019/analysis_of_fisheries_council_agreement_on_fishing_opportunities_for_deep_sea_stocks_2019-2020.pdf [Last accessed, 08.09.2020]

³ Defra, 2019.

https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/841246/marine-strategy-part1-october19.pdf [Last accessed, 08.09.2020]

⁴ Defra, 2018. Available at: <https://www.gov.uk/government/consultations/fisheries-white-paper-sustainable-fisheries-for-future-generations/sustainable-fisheries-for-future-generations-consultation-document> [Last accessed, 08.09.2020]

recovering and sustainably managing fish stocks results in increased profits.^{5,6,7} The most recent, an Oceana report from 2018, indicated that recovering UK fish stocks to healthy levels (associated with the maximum sustainable yield (MSY)) would result in an estimated 37% rise in the value of fish landings, and more than 5000 new jobs. The strong evidence that sustainable fishing benefits coastal communities demonstrates that following the advice and restoring fish populations is a 'win-win' situation.

The following outlines a summary of the key recommendations we urge the UK Government to adopt in its approach to the setting of fishing opportunities and management of fisheries for 2021:

- **Propose and set catch limits not exceeding the best available scientific advice provided by ICES, both for stocks with advice based on the ICES maximum sustainable yield (MSY) approach and for stocks with advice based on the ICES data-limited precautionary approach;**
- **Where applicable, propose and set catch limits which do not exceed the F_{MSY} point value specified by the retained multi-annual plans (MAPs);**
- **Factor in the widely recognised poor compliance with the Landing Obligation⁸ by proposing and setting catch limits lower than the recommended ICES advice, to ensure the agreed catch limit does not lead to fishing mortality beyond sustainable levels;⁹**
- **Where relevant, factor in ICES mixed fisheries advice and propose lower catch limits than the ICES single species wanted catch advice for some stocks to ensure that all stocks in mixed fisheries are restored and maintained above biomass levels capable of producing MSY as required under domestic and international commitments;**
- **Propose and set catch limits that follow a more precautionary approach for deep sea stocks that are particularly vulnerable to overfishing,¹⁰ including setting a zero Total Allowable Catch (TAC) where recommended by ICES;**
- **Demonstrate the UK's commitment to taking an ecosystem-based approach by setting catch limits for forage species (such as sand eel) that take the important ecological role of these stocks into account;**
- **Provide an effective control system with the necessary tools to ensure that actual catches do not exceed agreed catch limits;**
- **Roll out Remote Electronic Monitoring (REM) with cameras on-board vessels over 10 m in length, which account for the majority of the catch, to fully document catches of target and non-target species and support compliance with management measures;**
- **Implement protections in areas that are known to be important spawning and nursery areas, utilising the work carried out by the Centre for Environment, Fisheries and Aquaculture Science (Cefas)¹¹ to deliver Fish Stock Recovery Areas and protections for key habitats.**

⁵ World Bank, 2017. The sunken billions revisited: progress and challenges in global marine fisheries. Environment and Development. Washington, DC: World Bank. © World Bank. <https://openknowledge.worldbank.org/handle/10986/24056> License: CC BY 3.0 IGO. [Last accessed, 08.09.2020]

⁶ NEF, 2012. Available at: https://b3cdn.net/nefoundation/e966d4ce355b7485c1_a7m6brn5t.pdf [Last accessed, 08.09.2020]

⁷ Oceana, 2018. More food, more jobs and more money in the UK: Oceana's recipe for fish recovery. Available at: <https://eu.oceana.org/en/publications/reports/more-food-more-jobs-and-more-money-uk-oceanas-recipe-fish-recovery> [Last accessed, 08.09.2020]

⁸ As suggested by various sources including: EFCA (2020); STECF (2020); and various ICES advice on fishing opportunities indicating that below minimum size landings have not increased (e.g. North Sea cod and haddock according to observer data).

⁹ ClientEarth, 2020. Setting Total Allowable Catches (TACs) in the context of the Landing Obligation. Available at: <https://www.documents.clientearth.org/library/download-info/setting-total-allowable-catches-tacs-in-the-context-of-the-landing-obligation/> [Last accessed, 08.09.2020]

¹⁰ Koslow J.A., Boehlert G.W., Gordan J.D.M., Haedrich R.L., Lorange P., Parin N., 2000. Continental slope and deep-sea fisheries: implications for a fragile ecosystem. Available at: <https://academic.oup.com/icesjms/article/57/3/548/635930> [Last accessed, 08.09.2020]

¹¹ Cefas, 2012. Available at: <https://www.cefas.co.uk/publications/techrep/TechRep147.pdf> [Last accessed, 08.09.2020]

Shared Stocks

The UK and the EU share a significant number of stocks which require collaborative management to ensure they are sustainably exploited. It is therefore vital the UK and EU agree on a framework for future fisheries management which prioritises sustainability and contributes to the goal of ending overfishing. Catch limits for these shared stocks must be based on the best available scientific advice and should not exceed F_{MSY} . The UK and EU member states made the commitment in the 2013 Common Fisheries Policy (CFP) reform to end overfishing by 2020 – a commitment also reiterated in a number of other international agreements. This deadline has now passed, however catch limits continue to be set above the scientific advice provided by ICES for a significant proportion of assessed stocks of interest in the UK. For depleted stocks this is preventing their recovery to, let alone above, levels capable of supporting the maximum sustainable yield.

The UK should therefore use this opportunity to establish a fisheries management agreement with the EU which achieves the aims of ending overfishing and rebuilding fish populations. Achieving sustainable fishing would benefit the UK economy while also helping to address the current climate¹² and biodiversity emergencies.¹³

In shared stock negotiations, the UK should take a position that ends overfishing and follows the best scientific advice. We therefore recommend that:

- Agreements on shared stocks should mirror the best available scientific advice and catch limits should be set at levels that do not exceed the F_{MSY} reference point. Fishing opportunities should also reflect both a precautionary and ecosystem-based approach to fisheries management to ensure long-term sustainability and conserve marine biodiversity;
- At the Coastal States negotiations, the UK should adopt an ecosystem-based approach to fisheries management. Due to their importance within the marine ecosystem, the UK should advocate for catch limits below the F_{MSY} reference point for mackerel, blue whiting and herring specifically;
- The UK should also support the implementation of sharing arrangements and long-term management strategies which contain harvest control rules that are precautionary;
- In negotiations with the EU and Norway, the UK should advocate for the adoption of long-term management strategies for shared stocks that deliver on sustainability commitments to not exceed F_{MSY} and ensure the biomass remains above the level needed to support the maximum sustainable yield.

Mixed Fisheries

We recognise that the fisheries around the UK are particularly mixed and this can present challenges for management and for the industry, particularly when dealing with overfished stocks. However, there are multiple measures that can be implemented simultaneously to mitigate these challenges and reduce fishing pressure where necessary. These include:

¹² Trueman C.N., Johnston G., O'Hea B., MacKenzie K.M., 2014. Trophic interactions of fish communities at midwater depths enhance long-term carbon storage and benthic production on continental slopes. Available at: [https://www.researchgate.net/publication/262884286 Trophic interactions of fish communities at midwater depths enhance long-term carbon storage and benthic production on continental slopes](https://www.researchgate.net/publication/262884286_Trophic_interactions_of_fish_communities_at_midwater_depths_enhance_long-term_carbon_storage_and_benthic_production_on_continental_slopes) [Last accessed, 08.09.2020]

¹³ IPBES, 2019. Report of the plenary of the [United Nations] intergovernmental science-policy platform on biodiversity and ecosystem services on the work of its seventh session. Addendum: summary for policymakers of the global assessment report on biodiversity and ecosystem services of the IPBES. Available at: https://ipbes.net/system/tdf/ipbes_7_10_add.1_en_1.pdf?file=1&type=node&id=35329 [Last accessed, 26.11.19]

- Mandating the use of highly selective fishing gears. Whilst there are a wide range of gear modifications that can be applied to improve the selectivity of some fisheries, several are not being widely used and there remains scope for combinations of devices to be used to further reduce the catch of unwanted fish. A list of authorised mitigation measures should be made available for various fisheries and a database outlining which fleets are using what devices would be useful to track progress and to demonstrate that fishers and fleets are doing everything they can to minimize unwanted catches;
- Use mixed fishery MSY advice provided by ICES to inform fishing limits which will mean setting catch limits for certain stocks below their single-stock advice to avoid overexploiting others caught in the same fishery;
- Adopt spatial measures including temporary and permanent closures, real-time closures (RTCs) and ‘move-on’ rules to help avoid the more vulnerable species that have fewer fishing opportunities available.
- Ensure that additional measures are designed to complement, not replace, setting catch limits in line with scientific advice;
- Ensure total fleet capacity in a region is set at a level that aligns with the available sustainable fishing opportunities;
- Ensure independent, reliable monitoring and full documentation of catches through observer coverage and REM;
- Better enforced management measures through increased fisheries patrols;
- Provide financial assistance (e.g. EMFF replacement) to support the delivery of the above.

Using a combination of the above tools, fishers and managers should be able to reduce the likelihood and mitigate the impact of “choke” situations whilst still fishing within MSY limits. These tools are not currently being used to their full extent (and in some cases not at all). The UK Government should ensure that all these options are used to their maximum effect, particularly for at-risk species and stocks.

Depleted stocks with zero or very low catch advice

There are several stocks of interest to the UK where the ICES advice is for a very low catch limit, or zero catch. Managing mixed fisheries containing stocks that have received zero or very low catch advice presents a number of complications. We are extremely concerned that limited concerted effort has been made by UK governments to apply more progressive management measures to these fisheries to try and recover them. Any prospect of recovering these fish populations appears unlikely under the continuation of the status quo. These stocks are a public resource and recovering them, rather than perpetuating a clearly unsustainable situation by failing to take effective action, would provide long-term benefits for our seas and coastal communities.

There are steps that can be taken to reduce unwanted catches and minimise the impacts of fishing on depleted stocks. Many such measures are presented in the advice above and would also help to achieve sustainable mixed fisheries generally. With specific regard to low/zero catch advice stocks:

- Follow the scientific advice provided by ICES and set catch limits accordingly;
- Ensure that ‘bycatch TACs’ are not granted unless the relevant management authority has put in place a bycatch reduction or rebuilding plan that effectively reduces bycatches, sets the relevant stocks on a pathway to recovery above levels capable of producing MSY as soon as possible, and is fully documented using REM;
- Where bycatch TACs are set, their level must be geared towards a rapid recovery of the depleted stocks in question, rather than towards a full exploitation of the fishing opportunities

of healthy stocks in the fishery,¹⁴ and must under no circumstances exceed F_{MSY} . Additional scientific catch scenarios focusing on the level by which target catch limits would have to be decreased in order to rebuild vulnerable stocks may help inform fisheries management, which could avoid immediate fisheries closures while still allowing depleted stocks to recover;

- Management measures for mixed fisheries must prioritise the needs of the most vulnerable stock(s). To do otherwise is to effectively cast aside an entire wild population of fish and continue jeopardising the integrity and health of the ecosystem. Furthermore, ensuring fishing pressure on the most vulnerable stock remains sustainable would result in the overall fishing pressure also being sustainable. UK governments should prioritise recovery of depleted stocks over short term profit maximisation, as this is in the long-term interest of coastal communities and the marine environment;
- There are no mixed fisheries concerns with the herring stock in divisions 6a and 7b-c. Consequently, the UK should set a zero TAC in line with ICES advice.

Deep Sea Fishing Limits

The majority of TACs set for deep-sea fish stocks in the Northeast Atlantic for 2020 exceeded the scientific advice recommended by ICES.¹⁵ The biological characteristics of most deep-sea species and the ecosystems they inhabit make them particularly vulnerable to over-exploitation and poorly adapted to sustained fishing pressure since their productivity and recovery capacity are very limited.¹⁶ Consequently, management of deep-sea fish populations should be governed by a precautionary approach that prioritises preventing negative impacts of fishing on these stocks, taking into account the uniquely vulnerable nature of these species and their ecosystems. We therefore recommend that:

- Catch limits should be set in accordance with the best available scientific advice, which in the absence of MSY-based scientific advice means using the ICES ‘precautionary approaches to fisheries management’. Since none of the deep-sea stocks currently have MSY-based scientific advice, serious efforts are needed to improve the data situation and enable MSY-based stock assessments;
- TAC removal is not a solution to sustainable management. It should not be used and should be reversed where it has already occurred. Removing a TAC downgrades the concerned fisheries from a situation where the catches are capped to limit fishing mortality, into a situation where catches are effectively unlimited;
- The UK Government should support the adoption of a zero TAC for orange roughy at NEAFC;

Key stocks of concern

Seabass

The 2020 ICES advice for the seabass stock in Divisions 4.b–c, 7.a, and 7.d–h (central and southern North Sea, Irish Sea, English Channel, Bristol Channel, and Celtic Sea) continues to show some improvement in comparison with the last years’ trends.¹⁷ The stock has been managed under the

¹⁴ ClientEarth, 2020. Ask the right question, get the right answer: Scientific advice for bycatch or non-targeted stocks that have zero catch advice. Available at: <https://www.documents.clientearth.org/library/download-info/ask-the-right-question-get-the-right-answer-scientific-advice-for-bycatch-or-non-targeted-stocks-that-have-zero-catch-advice/> [Last accessed, 08.09.2020]

¹⁵ EC, 2019. Available at: https://eur-lex.europa.eu/resource.html?uri=cellar:e9de678c-cba1-11e8-9424-01aa75ed71a1.0016.02/DOC_1&format=PDF. Note that the 6 remaining TACs were removed. [Last accessed, 08.09.2020]

¹⁶ Norse E.A., Brooke S., Cheung W.W.L., Clark M.R., Ekland I., Froese R., Gjerde K.M., Haedrich R.L., Heppell S.S., Morato T., Morgan L.E., Pauly D., Sumaila R., Watson R., 2012. Sustainability of deep-sea fisheries. Available at: <http://www.ecomarres.com/downloads/deepsea.pdf> [Last accessed, 08.09.2020]

¹⁷ ICES, 2020. Available at: <http://ices.dk/sites/pub/Publication%20Reports/Advice/2020/2020/bss.27.4bc7ad-h.pdf> [Last accessed, 08.09.2020]

Western Waters Multi-Annual Plan (WW MAP) since the start of 2019 and the UK Government should be commended for the progress that has been made to reduce fishing pressure, thus allowing the stock to start to recover. Although this is a welcome result, the stock is still fragile and its condition remains unsatisfactory at just above its lower biomass limit (B_{lim}), and is still projected to decline if the F_{MSY} -based advice is followed. We therefore recommend a precautionary approach is taken when setting catch limits for seabass in these divisions, and that management measures should remain in place to allow the continued recovery of the stock.

Whilst the stock is still recovering and is below $MSY B_{trigger}$, we believe managers need to ensure the biomass consistently and sufficiently increases year on year and maintains a positive trajectory until it has fully recovered. As requested, ICES has advised catches for seabass between 1680 – 2000 tonnes when the WW MAP is applied, however setting catch limits at even the lowest end of this range would only result in a 0.18% increase in the Spawning Stock Biomass (SSB) over the year at best. This also makes the assumption that there is full compliance with management measures. Anecdotal information, on the contrary, suggests that full compliance is highly unlikely across all sectors (particularly amongst gill netters in the southwest), and therefore even achieving a genuine increase of 0.18% is unlikely. This level of recovery is negligible and would leave this stock at a precarious level. We therefore recommend a lower, bycatch-only catch limit in the order of 1000 tonnes with measures akin to those observed in 2018.

Efforts to restore the seabass stock to sustainable levels will be undermined if there is insufficient control and enforcement. In 2019, ICES noted that total discards were considerably underestimated. This, combined with ongoing anecdotal claims of targeted fishing for bass, suggests there remains a strong need for the UK – in particular the English IFCAs – to further support robust surveillance and enforcement of seabass fisheries management measures. We therefore suggest an increase in the number of at-sea inspections and close monitoring of monthly reported landings data.

Cod and whiting with zero/low catch advice

ICES have again advised zero catches for Atlantic cod off the West of Scotland, and for whiting stocks in the Irish Sea and off the West of Scotland. Additionally, ICES advise a low TAC is set for the cod stock in the Irish Sea, and while the new advice for Celtic Sea cod (last year subject to zero-catch advice) has not been published yet it is reasonable to assume that its situation remains dire. These stocks show little signs of recovery¹⁸ as fishing mortality has been far in excess of advised levels – a striking example of the complications that arise from failing to take a precautionary, ecosystem-based approach when managing mixed fisheries. It is now vital that managers set out measures that increase the selectivity of fisheries operating in these areas, so as to reduce the catches of cod and whiting if we are to see some recovery in these stocks. These measures should include:

- The establishment of closed areas which aim to protect large aggregations of cod and whiting and move-on rules that would prevent large amounts of bycatch of these species;
- Identifying areas in UK waters that could be seasonally or permanently closed to improve juvenile survival and protect spawning adult fish, using the work on spawning and juvenile grounds for commercial species provided by Cefas;¹⁹
- The mandatory use of REM to improve the monitoring of fishing activities encountering these stocks;

¹⁸ ICES, 2020. Available at: <http://ices.dk/sites/pub/Publication%20Reports/Advice/2020/2020/cod.27.6a.pdf> [Last accessed, 08.09.2020]

¹⁹ For example; Ellis, J.R., Milligan, S.P., Readdy, L., Taylor, N. and Brown, M.J., 2012. Spawning and nursery grounds of selected fish species in UK waters. Sci. Ser. Tech. Rep., Cefas Lowestoft, 147: 56pp. Available at: <https://www.cefas.co.uk/publications/techrep/TechRep147.pdf> [Last accessed, 08.09.2020]

- Improvements in gear selectivity that should also prevent smaller cod and whiting from being caught unintentionally;
- An increase in the minimum conservation reference size to match cod's length at maturity e.g. L_m is 45/46 cm for the North Sea.²⁰

North Sea Cod

The status of Atlantic cod in the North Sea remains fragile. In 2019 ICES advised a significant 61% reduction in the TAC.²¹ Following negotiations, delegates decided to reduce the TAC by 50% and implement supplementary management measures aimed to protect spawning areas and reduce the amount of cod caught as bycatch. These additional measures included real-time closures, seasonal closures for the protection of juvenile cod, establishment of restricted areas and gear-related technical measures. However, since these negotiations in 2019, the only on-water changes have been the implementation of spawning closures in Scotland. Given the current state of North Sea cod it is vital that fishing opportunities for 2021 are set in line with the latest scientific advice and that the supplementary management measures are promptly and effectively implemented.

Fishing limit recommendations for North Sea Cod:

- We welcomed the decision for a 50% reduction in TAC and believe it is a good start to recover this stock. We appreciate that it is a substantial cut which will have some economic impacts on the fleet, however we believe it is important to recognize that the ICES advice stipulated the TAC should be reduced by 61% (MSY approach). The 50% reduction was already a compromise that exceeded the scientific advice and must be supported by key avoidance and other management measures in order to achieve environmentally sustainable management;
- We recommend setting a TAC that does not exceed the 14 755 tonnes advised by ICES.

Reductions in fishing limits should be supplemented with additional management measures. The following comments relate to the measures proposed by the North Sea Regional Group in January:

- We support a reduction in soak time for longline and gillnet gear. Whilst the purpose for this would be to minimise gear conflict, we think the existing soak times – of up to three days - are too long and do not represent industry best practice.²² Reducing soak times can also increase the ability for vulnerable bycatch species to be released alive and also has benefits for the quality and freshness of the catch;
- It is our view that for the RTC proposal to be truly effective it should incorporate REM with cameras to sufficiently evidence the process;
- Trawlers fishing outside *Nephrops* fishing grounds should use a larger codend mesh size as this would reduce the catch of small cod. It would be preferable to have at-sea monitoring of this measure in action and cameras could be used positively to evidence any demonstrable reduction of smaller cod which could be used by industry to their benefit;
- We believe the whole demersal towed gear North Sea fleet (TR1 & TR2) should be required to use highly selective gear, not only those wishing to fish within precautionary areas;
- Boats targeting *Nephrops* should be using selectivity measures to avoid over quota or juvenile cod and the use of an inclined grid, which has been demonstrated to work elsewhere, should

²⁰ Marty, L., Rochet, M.J., Ernande, B., 2014. Temporal trends in age and size at maturation of four North Sea gadid species: cod, haddock, whiting and Norway pout. Available at:

https://www.researchgate.net/publication/261359856_Temporal_trends_in_age_and_size_at_maturation_of_four_North_Sea_gadid_species_Cod_haddock_whiting_and_Norway_pout [Last accessed, 08.09.2020]

²¹ ICES, 2020. Available at: <http://ices.dk/sites/pub/Publication%20Reports/Advice/2020/2020/cod.27.47d20.pdf> [Last accessed, 08.09.2020]

²² Seafish, 1994. Available at: https://www.seafish.org/media/Publications/datasheet_94_24_FG.pdf and Bell J.D., Lyle J.M., 2016. Available at: <https://journals.plos.org/plosone/article?id=10.1371/journal.pone.0166632> [Last accessed, 08.09.2020]

be revisited for efficacy in UK fleets. Requirements to use at least two devices would be preferable e.g. SMP plus an inclined grid;

- Given the importance of being able to evidence and demonstrate use of selectivity devices, we believe all vessels wishing to fish within precautionary areas should be equipped with REM as a precondition;
- Vessels fishing within precautionary areas should also be required to have a combination of at least two selectivity measures in places, not only one as stated in the current management proposal;
- We support the proposal to increase the cod minimum conservation reference size (MCRS) to 45 cm as it is an important move towards properly protecting juvenile cod which, according to Marty et al. (2014), have an average length at maturity of 45/46 cm.²³ Increasing the MCRS as close to this value as possible and associated increases in mesh sizes could vastly improve the selectivity and avoidance of juvenile cod in this fishery.

We hope Defra find these recommendations helpful and are able to incorporate them into government policies and plans regarding the setting of fishing opportunities for 2021 and beyond. For more information or to discuss these recommendations, please contact:

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²³ Marty, L., Rochet, M.J., Ernande, B., 2014. Temporal trends in age and size at maturation of four North Sea gadid species: cod, haddock, whiting and Norway pout. Available at:
https://www.researchgate.net/publication/261359856_Temporal_trends_in_age_and_size_at_maturation_of_four_North_Sea_gadid_species_Cod_haddock_whiting_and_Norway_pout [Last accessed, 08.09.2020]