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The publication covers all aspects of the seafood industry from sea to plate including dedicated sections on aquaculture, commercial fishing, marine science and seafood processing and much more.

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SCOTS FLEET WRAPS UP BLUE WHITING FISHERY

The Scottish fleet has successfully completed its annual blue whiting fishery in the North Atlantic to the West of Ireland and Scotland.

About a quarter of the Scots pelagic fleet engages in the fishery each year, with catches landed into Killybegs in Donegal, and Peterhead. Some of the Peterhead landings were destined for the human consumption market in West Africa.

For Scottish mackerel and herring fishermen, blue whiting forms an important annual eight week fishery that generally starts in February. For those factories that process blue whiting, it fills-in what would otherwise be a quiet period when there is no mackerel and herring fishing going on.

Blue whiting is technically difficult fishery to operate in, and skippers need to exhibit great skill and perseverance when fishing.

A member of the cod family, the blue whiting is a medium sized fish that is typically about 22 to 30cm in length, although they can grow larger. They are rather unusual in that unlike their cousins the cod and haddock, which are found on the seabed, blue whiting are largely midwater swimmers and behave more like pelagic fish such as herring and mackerel. They form large shoals at depths of around 400m along the continental shelf.

MARKET FLEXIBILITY SHOWN BY SCOTTISH SALMON FARMING

The latest export statistics published by HMRC show that the Scottish salmon farming sector reacted swiftly to the impact of coronavirus as it began to spread through Asia and into Europe.

The HMRC figures for exports in February 2020 show a drop of 2,700 tonnes compared to the same month last year. Valued at £32 million, this represented a decline of 32 per cent on February 2019.

Exports to Asia accounted for the majority of the decline with volumes only just exceeding 200 tonnes in February, down by 1,360 tonnes (-87 per cent) compared with year earlier figures. As a result, exports to Asia accounted for only around 4 per cent of total volumes and 5 per cent of value where they previously accounted for around 25 per cent of each – as distribution logistics became more complex and food service and consumer demand fell as the coronavirus spread.

However, the Scottish salmon sector shifted export sales from Asian markets to Europe achieving a boost in market share, rising to 59 per cent and 55 per cent for volume and value respectively. Some additional value was also found in European markets – 3 per cent – despite volumes being down 10 per cent.

UK FOOD SECTOR CALLS ON MARKET SUPPORT

Trade associations from across the UK food and drink supply chain have come together to publish a letter, calling on all Governments to ensure the continuation of critical imports and exports of food and drink at this critical time.

Ian Wright, chief executive of the Food and Drink Federation, said: “COVID-19 is the biggest threat this country has faced in decades, and all over the world we are seeing its devastating impact. It is therefore not surprising that this creates huge challenges for the United Kingdom. Our food and farming industries are working hand-in-hand with departments across the Government on a daily basis to ensure that consumers have continued confidence that there will be adequate supplies of food and drink.

This global crisis highlights just how integral food and farming industries are to our country’s critical national infrastructure and Government has rightly acknowledged the crucial role played by the more than four million hidden heroes in every community that work across the UK’s essential farm-to-fork supply chain.

LOW IMPACT FISHING PROJECT

The Countryside and Community Research Institute (CCRI) is working with the New Economics Foundation (NEF), MRAG and Cefas on a project for Defra that is seeking to co-design, with fisheries stakeholders, principles and criteria that can be used to define low impact fishing.
**SUPPORT FOR SCOTTISH SEAFOOD INDUSTRY WORTH £22.5 MILLION**

The announcement of a further £3.5 million to help large sea fishing vessels brings the total made available to the seafood industry by the Scottish Government from new and existing funds to £22.5 million.

The Government has used UK funding as well as existing Scottish budget to help meet the unique needs and circumstances of key sectors in the rural economy hit hard by the coronavirus (COVID-19) outbreak.

While the four financial support schemes announced so far will in particular help businesses based in coastal and island communities, key employers around Scotland involved in fish processing and trout farming will also benefit.

The latest scheme will provide capped payments of up to £21,370 per vessel to businesses with a vessel over 12 metres landing shellfish such as crab, lobster, scallop and langoustine to help them meet fixed costs like insurance. It will also provide up to £42,740 for businesses operating more than one vessel. Amounts will be graduated by fleet segment and length category.

FINANCE FOR SHELLFISH AND TROUT FARMERS

Aquaculture businesses threatened by the effects of COVID-19 can now get financial support from the Scottish Government.

Harshship payments of up to £27,000 are being made available for around 100 businesses which make a full time living from shellfish-growing and trout farming. Rural Economy Secretary Fergus Ewing said: “COVID-19 is having a profound impact on all aspects of Scottish life which is why the Scottish Government is working to protect lives and livelihoods.”

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**SEAL DETERRENT TRIALS TO PROTECT GILL NET FISHERY**

The findings of acoustic seal deterrent trials undertaken in an inshore gill net fishery have been published by the Marine Management Organisation (MMO).

The trials were part of a wider study, led by ABPmer on behalf of Defra and the MMO, to improve understanding of how seals interact with English fisheries and to examine non-lethal measures to deter them from taking catches (depredation).

Over ninety fishermen responded to a survey about their experiences with seals. Following this data gathering exercise, ABPmer reviewed the different methods available to reduce seal depredation — namely gear modifications, fishing tactics and non-lethal deterrents. The outcome of the review found that there were limited commercially-available non-lethal options for use in fisheries.

This led to trials being carried out using a prototype of the targeted acoustic startle device (ASD) developed by Genuswave, which triggers a startle response that causes a seal to move away from the sound.

It operates at a much lower sound dose (volume and duration) than other acoustic deterrents and a frequency range where seals’ hearing is more sensitive than other species. The ASD has no adverse impact on marine mammals such as dolphins and porpoises, and should be more effective in the long-term at deterring seals compared with other deterrent devices.

Two inshore vessels (one from Torquay, the other from Brixham) were involved in the trials, each deploying two nets at a time — one net fishing as normal (the ‘control’), and one net with one or more ASDs deployed nearby (the ‘test’ net). Catches from each net were recorded, as well as the number of damaged fish in each net.

**NEW PLAN FOR SEA LICE RESISTANCE**

A new, cost-effective selective breeding method is being developed by a Scottish research consortium that could enhance fish health and wellbeing by improving salmon resistance to the perennial challenge of sea lice.

The project — led by Dr Smaragda Tsairidou and Professor Ross Houston at the University of Edinburgh’s Roslin Institute — is using genetic data to create a novel technique for identifying salmon with enhanced natural resistance to sea lice. The researchers worked in collaboration with Hendrix Genetics and the University of Stirling’s Institute of Aquaculture as part of a project supported by the Scottish Aquaculture Innovation Centre (SAIC).
MACKEREL AND HERRING A GREAT SOURCE OF VITAMIN D DURING PANDEMIC

With the current Covid-19 restrictions meaning that many people are confined indoors for much of the day, there is increased likelihood that many in the population are not getting enough vitamin D from sunshine exposure.

However, there are some foodstuffs that are good sources of vitamin D – including oily fish such as Scottish caught mackerel and herring.

Robert Duthie, chairman of the Scottish Pelagic Processors’ Association said: “Research has shown that both mackerel and herring are good sources of vitamin D, and with the current Covid-19 restrictions confining people indoors for much of the day, it makes sense to ensure that both types of fish form a regular part of our diets.”

Both canned and hot smoked mackerel are widely available in food retailers, as well as fresh fish in season. Herring is also convenient to buy, especially as smoked fish (kippers) or in marinated form.

“Scottish mackerel and herring are sustainably caught, taste great and are not comparable to most other proteins, representing excellent value for money,” added Mr Duthie. “Both fish are rich in heart-healthy omega-3 fatty acids and are a great source of essential minerals and vitamins.

“Nutritional experts say we should all aim to eat two portions of fish a week, and which should be an oil-rich fish such as herring or mackerel. In these times when we are all going to have to tighten our belts, mackerel and herring are the perfect meal choice for taste, our health and our pockets.”

NAFC MARINE CENTRE SECURES FINDING FOR COMMUNITY WILDLIFE GROUP

NAFC Marine Centre UHI has received funding from the Heritage Lottery Fund (HLF) to establish a ‘Shetland Community Wildlife Group’. This exciting citizen science project will focus on creating a community led group of volunteers interested in Shetland’s varied wildlife.

The project will enable local people to get involved in nature, learn new skills, speak to like-minded people and collect meaningful scientific data. The volunteers will have the chance to take part in surveys and monitoring to answer specific science questions, and will be able to participate in a wide variety of training courses. Data will be used locally to fill knowledge gaps and inform marine and land-based planning decisions as well as feed into national data sets. The project is being launched virtually to allow people to participate within current social distancing guidelines.

CRITICAL WORKER CERTIFICATES AVAILABLE FOR UK SEAFOOD SECTOR

In response to calls from industry, Seafish has created ‘critical worker certificates’. These documents can be issued on request for fishermen and other key workers in seafood businesses to use when travelling to and from work or in the course of their work.

Simon Potten, Head of Safety and Training at Seafish said: “There’s no doubt that the restrictions imposed as a result of COVID-19 are having a huge impact on fishermen and seafood businesses across the country. It’s unlikely that there will be any let up in this soon, so this initiative forms part of our work to help maintain the fabric of the UK seafood sector in these challenging times.

“There isn’t a legal requirement for critical worker certificates to be carried but we’ve created them following requests from industry. If required, they can be used to help individuals demonstrate that they are a critical worker making a necessary journey.

“We’ve had a lot of interest in these certificates from fishermen and other seafood businesses already, with over 1,500 requests so far. We are processing applications as quickly as possible to support the businesses and individuals working hard to feed the nation.”

NEIL AUCHTERLONIE APPOINTED AS NEW CHAIR FOR SEAFOOD 2040

Seafish, the public body that supports the £10bn UK seafood industry, has announced the appointment of Neil Auchterlonie as the new chair of Seafood 2040.

The Seafood 2040 Strategic Framework was created following the establishment of a task force representing all sectors of the seafood sector in England in October 2015. It aimed to shape a long-term ambition to realise the full potential of industry by 2040. The programme is facilitated by Seafish, funded by the European Maritime Fisheries Fund and supported by Defra and England’s seafood industry.

Neil takes over the role following the departure of the inaugural programme chair Alison Austin. Neil is a technical expert in fisheries, aquaculture and sustainable seafood and has worked previously as an advisor to industry, governments and NGOs. He has worked most recently as Technical Director for IFIO, The Marine Ingredients Organisation a trade body representing fishmeal and fish oil producers worldwide. As well as roles with Defra, Cefas and the Environment Agency, his background also includes several production and technical roles in aquaculture, and work as a consultant. Neil has served as a member of the Seafood Science Advisory Group and also contributed to Seafood Corporate Plans through the Sector Panels.

Marcus Coleman, CEO of Seafish said: “COVID-19 has created an unprecedented set of challenges and Seafood 2040 will have an important role to play in helping the seafood industry in England to find its feet again. In light of this we are pleased to announce that Neil Auchterlonie has been appointed as the new chair for the Seafood 2040 programme.

“Neil brings a wealth of experience and knowledge and will be extremely valuable shaping the support the 2040 can deliver for the Seafood 2040.”

Neil has worked previously as an advisor to industry, governments and NGOs. He has also previously served on the Seafood 2040 Government Working Group alongside former chair Alison Aus. This puts him in an excellent footing to bring some continuity and further build on the excellent work she started.”

Critical worker certificates available for UK seafood sector
KOBVBÅGLAKS
ORDERS FEED BARGE FROM AKVA

Norwegian salmon farmer Kobbvåglaks has placed an order for their third feed barge from AKVA group - an AM 400 Comfort feed barge, scheduled for delivery in November 2020.

"Kobbvåglaks is a very well run company. It is a great recognition for AKVA group that they have confidence in us and that they now order a third AKVA feed barge," says Sales Director Nordic in AKVA group, Hans-Øyvind Sagen. Kobbvåglaks, based west of Sandnessjøen in Nordland, Northern Norway, recently signed a contract for the delivery of an AM 400 Comfort feed barge with six feeding lines from AKVA group. The barge, which is scheduled for delivery in November 2020, is equipped with AKVA Hybrid battery pack and will have vet room, workshop, control room, cabins/wardrobes and more.

“We already have two AM 320 feed barges from AKVA group that we are very pleased with, and needed a third feed barge with more capacity. We have good relationships with the AKVA group who are easy to work with and are very service-minded. It was an easy decision for us,” says Jan-Terje Mikalsen.

NEW EXECUTIVE CHAIRMAN FOR NUEVO PESCANOVA

The Board of Directors of the Nueva Pescanova Group, has elected José María Benavent as executive chairman of the Company. The Board also decided to renew its confidence in Ignacio González as Managing Director (CEO), a position he has served since February 2016.

The move follows Abanca formalising the takeover of the fishing company, after having taken 80.46% of the shares, by virtue of an agreement with Banco Sabadell and Caixabank.

SEAFOOD EXPO GLOBAL 2020 CANCELLED

Diversified Communications, organiser of Seafood Expo Global/Seafood Processing Global in Brussels, the world’s largest seafood event, has reluctantly determined that the continued expansion of the magnitudes of the public health and safety issues caused by COVID-19 worldwide now requires the cancellation of the 2020 edition of Seafood Expo Global/Seafood Processing Global. The event had previously been postponed due to COVID-19.

"Liz Plizga, Group Vice President, Diversified Communications, said: "Seafood Expo Global/Seafood Processing Global was originally scheduled for 21-23 April 2020 at the Brussels Expo in Belgium. When we announced the postponement of the 2020 event, we had expected to reschedule later this year. Given the recent announcement that the limitation on large gatherings in Brussels has been extended through 31 August 2020 and the ongoing impacts of COVID-19, including global travel restrictions, and the broad need to practice physical distancing, we have concluded it is impossible to hold the event. The complexities of organizing a safe, global event drawing seafood professionals from more than 158 countries in the midst of a pandemic pose too many insurmountable hurdles."

VIETNAMESE SHRIMP INDUSTRY SHOWS GROWTH OVER LAST FIVE YEARS

In the 5 years (2015-2019), Vietnam’s shrimp industry has achieved positive results in production and export, reports the Vietnam Association of Seafood Exporters and Producers (VASEP).

Shrimp farming area increased by an average of 1.4% per year, while production rose by an average of 5.7% annually, mainly due to improved whiteleg shrimp productivity. The production of whiteleg shrimp elevated sharply by nearly 41% after 5 years with an average increase of 9% per year.

Meanwhile, black tiger shrimp production went up by an average of 1.2% and only increased by 3.1% after 5 years; productivity did not have a significant growth compared to whiteleg shrimp.

Shrimp exports in the past 5 years achieved an average annual growth of 4% with an unstable annual growth. After 5 years, whiteleg shrimp exports have become increasingly dominant in export shrimp products thanks to strong growth.

Frozen shrimp products still accounted for a large proportion of Vietnam’s total shrimp exports. Processed shrimp accounted for a significant proportion only in some major markets (the US, EU, Japan). The proportion of processed shrimp in the US market was the highest, followed by the EU, Japan, then South Korea, while ASEAN and China represented for low proportion.

Vietnam’s top 6 shrimp importing markets included EU, the US, Japan, China and South Korea, accounting for 81-85% of the total shrimp import value in the last 5 years. Since 2017, the US and EU have exchanged positions because shrimp exports to the US have declined continuously and sharply decreased than the EU market. During this period, exports to China had the strongest breakthrough with an average annual growth of 16% and after 5 years increased by over 55%. After China, South Korea was also a notable market in the past 5 years, followed by the EU.
RUSSIA AND MOROCCO INK NEW FISHERIES DEAL

The Federal Agency for Fisheries for Russia has agreed with the Kingdom of Morocco on a draft new agreement between the Government of the Russian Federation and the Government of the Kingdom of Morocco on cooperation in the field of marine fisheries. The document will replace the agreement concluded on March 15, 2016.

At present, the representative office of the Federal Agency for Fishery in Morocco is conducting working consultations with the Moroccan side. It is planned that the new agreement will extend the existing agreements. Catch volumes and financial compensation of the parties should be agreed at the next session of the Russian-Moroccan Mixed Fisheries Commission.

The current agreement establishes the principles of cooperation between Russia and Morocco in the field of conservation and use of marine living resources of the exclusive economic zone of the Kingdom of Morocco and determines the conditions for fishing activities by vessels flying the flag of the Russian Federation.

FRIEND OF THE SEA CERTIFIES MARPESCA GROUP

Friend of the Sea has announced certification of the Marpescas (Grup Marpescas) for sustainable seafood production practices. Marpescas can now display the Friend of the Sea eco-label on its tuna, shrimp and other seafood products.

“We welcome the Marpescas Group to our family of environmentally-committed seafood producers,” said Paolo Bray, Director of Friend of the Sea.

“They deserve praise throughout the industry for adopting rigorous control measures.”

The Marpescas Group has a tradition of fishing that goes back over 60 years. The company is based in Panama, but co-ordinates fishing and distribution in Ecuador, the US and Spain. They own five tuna vessels of more than 1000gt each operating in the Pacific Ocean. The company distributes tuna, sole, swordfish, sea bream and all kinds of prawns and shrimp.

Paolo Bray commented that the tuna industry is increasingly demanding products from sustainable fishing processes.

STARKIST LAUNCHES MICROWAVABLE TUNA MEALS

StarKist Co. has announced its newest innovation, StarKist Creations Microwavables™, the first shelf-stable seasoned tuna with vegetables and grains in a microwave-safe pouch. New StarKist Creations Microwavables™ are available in four delicious varieties, including BOLD Spicy Rice and Beans, Tomato Basil, Latin Citrus and Thai Green Curry, and are ready to enjoy unheated or heated for 30 seconds—perfect for consumers who are always on the go.

“Today’s consumer seeks a balance between health and convenience when considering food purchases—both are extremely important. We kept this in mind when creating a microwavable product that is high-quality, and it helps shift the ‘unhealthiness’ stigma that has been pervasive in the past,” said Andy Mecs, Vice President of Marketing & Innovation, StarKist Co.

ICES POSTPONES MEETINGS AND ANNUAL SCIENCE CONFERENCE

The International Council for the Exploration of the Sea has postponed all face-to-face meetings with external participants until 30 June due to coronavirus.

An ICES statement said: “The health and safety of our staff and community are our primary concern. All meetings with external participants scheduled to take place at ICES Headquarters in Copenhagen until 30 June will be postponed/cancelled or organized via video conference.”

IBEROSTAR GROUP PARTNERS WITH FISHWISE

FishWise, a non-profit sustainable seafood consultancy, has announced a new partnership with international tourism company Iberostar Group. The partnership’s goal is to bolster education and training across Iberostar’s family of 32,000 employees on responsible seafood consumption, one of three priority action areas under the company’s Wave of Change movement.

By enabling employees to confidently message Wave of Change concepts to Iberostar’s eight million annual guests, Iberostar and FishWise’s ultimate aim is to inspire responsible seafood consumption amongst travelers both during and after their stays.

Iberostar Group operates over 120 four- and five-star hotels in 18 countries, the majority of which are located on seafront properties. Recognizing their unique position in both the hospitality and ocean landscapes as an opportunity to set a new, scalable business model for ocean stewardship in tourism, Iberostar launched Wave of Change in 2017 to tackle coastal health, plastics reduction, and seafood.
UK FISHING INDUSTRY CAUGHT IN THE PERFECT STORM

Keith Broomfield examines the impact of Brexit and Covid-19 on the UK seafood sector

It is a truism that never in modern times has the UK fishing and seafood sector faced so much challenge and turmoil. Brexit, of course, has been the underlying theme for the past few years, but now the impact of coronavirus is having a tumultuous impact with key exports markets much diminished and many seafood businesses facing great uncertainty as each week unfolds.

For Brexit, with coronavirus still maintaining its grip, it is increasingly difficult to see any likelihood of the UK and the EU agreeing a trade deal by the end of the year deadline set by the British government. The most likely scenario is an extension of current arrangements for at least a few more months beyond the end of December.

For much of the UK catching sector, especially the whitefish fleet which operates larger vessels, that will be a blow for the cherished ‘sea of opportunity’ of increased fishing opportunities, which keeps on slipping away through their fingers. However, many prawn and creel fishermen, as well as much of the processing sector, will be heaving a sigh of relief as it will maintain key European export markets and deliver a degree of certainty.

The UK and its devolved governments have already moved to provide financial support to many fishing, aquaculture, and seafood businesses to cope with the pandemic, which while welcome, this will only provide a sticking plaster solution to what is turning out to be a protracted crisis.
Fish producer organisations and vessel agents, which manage quotas on behalf of their members, are having to tie-up prawn boats and scallopers due to lack of market access, and the whitefish fleet is also operating at reduced capacity. For all these vessels, the challenge is to try and marry supply with demand, which is a tricky and daunting task. If there is one thing that any business hates, it is uncertainty.

One way of alleviating these marketing problems is to have a renewed focus on the domestic market, and fish vans which tour our towns and cities, are currently enjoying a boom. This is because they are serving residents who are not normally at home during the working week, and also because it provides a useful alternative outlet for people who are trying to keep their food shopping trips to a minimum.

It would also be beneficial once the lockdown eases if the fish and chip takeaway sector was one of the first parts of the closed economy to be allowed to reopen, with careful controls, given that it is such an important part of the fish processing sector, and also employs a large number of people in its own right.

Perhaps one benefit when the pandemic eventually comes to an end is that it will have given a much needed boost to the home market for seafood. With so much diversity and abundance of fish and shellfish around our shores, it is astonishing that this nutritious foodstuff is largely ignored by a large segment of the UK population.

The pandemic also means that another Scottish independence referendum is off the agenda for the foreseeable future, and as such, there is little likelihood of Scotland re-joining the Common Fisheries Policy any time soon.

Whatever the case, when it comes to Brexit, both the EU and the UK will need to be imaginative and courageous in negotiating a deal that benefits all. With economies around the world having taken a kicking, the last thing the UK or EU needs is a protracted trade battle. And that means compromises as all sides work together to rebuild their economies – including that of the seafood sector - once the pandemic ends.
Natural is best for Wester Ross Fisheries. The adoption of natural and environmentally friendly techniques for rearing salmon is reaping dividends for Scotland’s oldest independently owned salmon farming enterprise.

Founded in 1977 by Dr Robin Bradley and Alan Mann, Wester Ross Fisheries Ltd focuses on producing premium fish for top-tier customers around the world. The key to the company’s success has been its commitment to slowly hand-rear their salmon, rather than adopting modern automatic feeding, monitoring and management techniques.

The salmon at Wester Ross are not handled when in their pens, which keeps stress to a minimum, and every part of the operation is aimed at farming in sympathy with the environment. Sea lice are controlled naturally by cleaner wrasse, the fish are hand-fed, stocking densities are low, no medicines are used, and neither are anti-foulants for cleaning nets.

Wester Ross Fisheries also boasts one of the world’s best FIFO (fish in, fish out) ratios of less than 1:1, greatly reducing dependency on wild fish. This is achieved by only using fish-feed produced from trimmings of wild fish destined for human consumption, rather than from targeted fishmeal fisheries.

“We spend six times more farmer time with our salmon than the larger operators, constantly using the experience of our personnel to ensure the fish are healthy and growing well,” explains Barbora Gaborova, who is responsible for marketing at Wester Ross.

“We also try to recycle as much as is feasibly possible, including old salmon pen nets. It is an ethos that is at the very heart of our operation.”

The result is a great tasting salmon that is in large demand all around the world from discerning customers. About 50% of the salmon produced is exported to North America, 30% to Europe, the Middle East and Far East, with the balance for the domestic market.

Wester Ross Fisheries operates from three sites near Ullapool in the north-west of Scotland at Loch Broom, Loch Little Broom and Loch Kannaird, with the company striving to achieve a yearly production of 1,400 to 1,500 tonnes, harvested on a seasonal basis.
Once harvested, the fish are sent for filleting at the company's own primary processing facility at Dingwall, north of Inverness, before despatched by air freight to their global customers under the brand Wester Ross Salmon.

"Within two to three days of being harvested our salmon can be on the plates of consumers in North America or the Far East," states Barbora.

In Asia, the superb quality of the salmon means it is in strong demand for the sashimi market, and some of the fish is also destined for smoking, either locally at the nearby Ullapool Smokehouse or at smokeries abroad.

The lean flesh of our salmon makes it perfect for smoking, producing a superior product that tastes wonderful," says Barbora.

"Our salmon is a real 'white tablecloth' product and producing such high quality fish has enabled us to fill an important niche in the global market," she adds.

Wester Ross Fisheries is the local community's largest private employer, with a workforce of 42 people, plus a further 16 at the Dingwall processing site.

"This means we can provide high quality jobs that helps sustains families within the local community, which in turn supports shops and other businesses," states Barbora.

There are real opportunities for career progression within the company and two of the current directors here began working as farm operatives and worked their way up.

"We support local businesses as much as we can, whether it be hauliers for moving fish or equipment, or for printed marketing material, so that everyone in the community benefits." The company is also very active in supporting both local schools and community initiatives and has been involved in a whole range of projects in the recent years.

"Looking after the environment and supporting local communities is so important to us," says Barbora. "Our salmon is produced in a labour intensive and natural way, but that is how we have always done things, and will continue to do so into the future."

‘We also try to recycle as much as is feasibly possible, including old salmon pen nets.’

Curio C-2011 is the most flexible filleting platform in the world. It is unique in that each of the models XS, S, M & L and XL & XXL are all based on the same machine platform, sharing over 95% of the same components. The range over 6 models covers fish from 450g to 18kg (head on gutted).

**Filleting Machine**

The C-2011 Filleting Machine offers a high and consistent yield, achieved by a robust and reliable design for processing whitefish, salmon and trout. Simple user interface allows the operator to easily switch between different species, select different range settings, adjust the machine speed and operate the machine safely.

**Heading Machine**

The C-2027 Heading Machine is specifically designed for heading of whitefish such as cod, haddock, saithe, salmon and other similar fish. Simple user interface allows the operator to easily switch between different species, select different range settings, adjust the machine speed and operate the machine safely.

**Knife Sharpening**

The C-2015 Knife Sharpening Machine offers a simple and effective way to sharpen various sizes of circular knives for fish processing machines.

**Skinning Machine**

The C-2031 Skinning Machine is the latest processing equipment in Curio’s production. It is designed for the processing of all whitefish, trout and salmon.

The main objective of the skinning machine design is to remove the fish skin in a sensitive manner. We employ various technologies to keep the fillets firm throughout the process and the end result is therefore a beautiful texture of the processed fish.
SCOTTISH RESEARCHERS LAUNCH MONITORING TOOL THAT COULD TRANSFORM GLOBAL AQUACULTURE SECTOR

Researchers in Scotland are working towards a significant breakthrough in proactively managing fish health with the development of a biochemical monitoring tool that could transform the global aquaculture sector.

The diagnostic method – similar to approaches used in human and veterinary medicine – involves regular analysis of biomarkers in blood samples, such as mineral or electrolyte levels. Monitoring biomarkers and changes in fish behaviour could allow seafood producers to identify health concerns and pre-emptively manage fish health, using real-time results to inform treatment decisions.

Led by the University of the West of Scotland (UWS), the research project was recently awarded a significant funding package as part of the UK Seafood Innovation Fund, with support from the Scottish Aquaculture Innovation Centre (SAIC). The Scottish Salmon Company, Scottish Sea Farms, Mowi, Cooke Aquaculture, Loch Duart, Wester Ross Fisheries, Grieg Seafood and Kames Fish Farming are all also supporting the research.

One of the biggest challenges in aquaculture is understanding what ‘normal’ fish biomarkers look like and how they change when there is an issue. As part of the initiative, researchers are therefore running tests on thousands of samples to develop a digital database that will allow future blood samples to be cross-referenced against a set of biomarkers that represent normal conditions.

Brian Quinn, professor of ecotoxicology at the UWS Aquaculture Health Laboratory, said: “This type of proactive approach might seem a no-brainer, given that it’s already used widely in human medicine and agriculture. However, it’s a very complex process and we’re just scratching the surface when it comes to developing the system for fish health. Stage one is to establish a strong reference base, which will be crucial to the success of health monitoring – but this involves assessing thousands of samples with at least 30 biomarkers each.”

The new system could also boost the efficiency of the health monitoring process. Currently, fish farms tend to use a histological approach to check health indicators on a small sample of fish, which may not provide an accurate picture of the overall site and can take up to 14 days to return results. The new method of measuring biomarkers as an indication for kidney, heart or gill function, could return analysis in less than 24 hours with better data.

Using results from the research – also funded by SAIC, IBBR, and Innovate UK – to create a final product, the UWS team is planning to set up a spin-out company in around 12 months through the Scottish Enterprise’s High-Growth Spinout Programme.

Brian Quinn added: “While taking blood samples from fish is not the easiest process in itself, fish farmers are already getting out on to the water to make frequent checks and observations and adding regular blood sampling could become part of this routine. The equipment used to test the samples is also readily available, however, it is largely designed for human analysis. Therefore, we have recalibrated the kit to create a version that can be used for aquaculture testing specifically.

“The project has received a great deal of support from the sector so far, with companies recognising the potential impact and benefits of a proactive, data-led approach to fish health monitoring. The system could trigger a fundamental change in fish farming’s approach to health management, based on proactive, informed interventions – it’s the first time we’ve been in a position to offer this.”

Polly Douglas, aquaculture innovation manager at SAIC, added: “Enhancing fish health and wellbeing continues to be one of the biggest priorities for the aquaculture sector in Scotland. It’s great to be helping to facilitate partnerships between academia and the industry that can find new, more efficient methods for monitoring and diagnosis. When it comes to complex projects, collaboration is key to success.”

“Improving fish health is also a major focus of the Scottish Government’s 10-year Farmed Fish Health Framework. Innovation projects that can potentially boost efficiency and productivity will undoubtedly help Scotland’s main food export to grow sustainably.”
In the latest step to protect businesses affected by coronavirus, plans have been unveiled with up to £9 million being made available for grants to eligible fishing and aquaculture businesses.

A further £1 million will be made available to support projects to assist fishermen to sell their catch in their local communities. This money will help fishing businesses find new ways to market and sell their catch while traditional markets are restricted, not only supporting the sector but also the local communities that depend on the industry.

Because the majority of fish they catch is usually destined for export, the English fishing fleet which catches fish stocks such as hake, scallops and crab, has been hit by the closure of traditional export markets and the reduction in demand from the hospitality sector.

The support scheme – which will run for up to three months – takes action to meet the immediate needs of the industry by helping English fishing and aquaculture businesses with their fixed costs such as insurance, equipment hire and port costs.

The measures will support English industry, in particular smaller fishermen, during this challenging time and follow an unprecedented package of financial support already announced for small businesses.

The main features of the scheme are:
- For the catching sector, the fund will be open to under-24m vessel owners with fishing licences registered in England who recorded sales of £10,000 or more in 2019.
- Grants will be made to help cover fixed business costs. For the catching sector this will be calculated from the average business costs for the size of the vessel, as surveyed by the industry annually.
- Details of the eligibility criteria, including the criteria for the aquaculture sector and support for local projects, will be announced in due course by the Marine Management Organisation (MMO).
- The MMO will administer the fund, contacting eligible registered owners and licence holders directly in stages with details of how to apply, starting on Monday April 20 through to early May. Payments will be made for up to three months.
Environment Secretary George Eustice said: “This £10 million scheme will provide a lifeline for more than 1,000 fishing businesses so they can continue to maintain and operate their boats during this challenging time, which has seen falling prices and lack of demand for fish from the restaurant industry. “We are continuing to work closely with the fishing and aquaculture industry to ensure that they are supported and can get back to their vital role of providing fish for the table while contributing to the economy of many of our coastal communities.”

Chief Secretary to the Treasury Steve Barclay MP said: “Fishing is at the heart of many of England’s coastal communities – providing local jobs as well as valued produce to their communities and through exports around the world. “Given the loss of trade particularly to restaurants as a result of Covid-19, this support will help fishing businesses weather the current challenges they face, and facilitate new growth in retail markets through innovative local distribution.”

Tom McCormack, Chief Executive of the Marine Management Organisation, said: “We’ve continued to stay closely engaged with the fishing industry and are very much aware of the difficulties many fishing businesses have been facing with the downturn in markets for fish and shellfish. We absolutely acknowledge the importance of our fishing industries and share concerns about these current impacts – it is our problem too.

“The data we collect from the fishing industry has proved timely and incredibly valuable in helping to quickly evidence the current situation and to target where financial support is most needed. “We will be reviewing as we go, and will continue to engage with and listen to industry to ensure we’re supporting our fishing industry in the right ways.”

The seafood and fisheries sectors are encouraged to apply for the existing support available for businesses, including the Coronavirus Business Interruption Loan Scheme and the Coronavirus Jobs Retention Scheme.

“This grants to fishing vessels will go a considerable way to covering some of the mounting fixed costs faced by fishing businesses, at a time when lockdown has removed or seriously diminished markets for fish and shellfish. It is a top-up/tie-up scheme which will allow those vessels that have been forced to tie-up to resume fishing as soon as it is judged that there are markets to sustain a return to fishing activities and to contribute to the nation’s food supply.

“The scheme also brings belated parity with terrestrial businesses (which can access small business grants of £10,000), and with fishing fleets under the devolved administrations in Scotland, Northern Ireland and Wales, which have already announced their own support measures.

‘This is a further important step towards shielding our crews and fleets economically’
DRIVEN CHANGES – ARE PERTURBING MARINE ENVIRONMENT – COUPLED WITH CLIMATE-DIRECT HUMAN PRESSURES ON THE MARINE PROVIDE FURTHER EVIDENCE THAT INCREASING SENSITIVE MARINE COMMUNITIES.

The study’s authors say their findings of our changing climate on these highly sensitive marine communities. They also say it is crucial to helping understand broader changes across UK waters, since any shifts in plankton communities have the potential for negative consequences for the marine ecosystem and the services it provides.

Since plankton are the very base of the marine food web, changes in the plankton are likely to result in changes to commercial fish stocks, sea birds, and even the ocean’s ability to provide the oxygen we breathe.

The analyses of plankton functional groups showed profound long-term changes, which were coherent across large geographical areas right around the UK coastline.

For example, the 1998-2017 decadal average abundance of meroplankton, a group of animal plankton, which includes lobsters and crabs and which spend their adult lives on the seafloor, was 2.3 times that for 1958-1967 when comparing CPR samples in the North Sea, at a time of increasing sea surface temperatures.

This contrasted with a general decrease in plankton which spend their whole lives in the water column, while other offshore species noticed population decreases of around 75%.

The study was led by former postdoctoral researcher Dr Jacob Gollop, from the University of Plymouth’s Marine Conservation Research Group. It

Global climate change will affect fish sizes in unpredictable ways and, consequently, impact complex food webs in our oceans, a new Institute for Marine and Antarctic Studies (IMAS)-led study has shown.

Led by IMAS and Centre for Marine Socioecology scientist Dr Asta Audzijonyte and published in the journal Nature Ecology and Evolution, the study analysed three decades of data from 30,000 surveys of rocky and coral reefs around Australia.

Dr Audzijonyte said the study confirmed that changes in water temperature were responsible for driving changes in average sizes of fish species across time and spatial scales.

“Cold-blooded animals, especially fish, have long been noted to grow to a smaller size when raised in warmer temperatures in an aquarium,” Dr Audzijonyte said.

“If fish grow to smaller sizes in warmer aquaria, it is only natural to expect that global warming will also lead to shrinkage of adult fish size.

“However, average fish body size in wild populations are affected by growth, mortality and recruitment as well as interactions with other organisms and their environment simultaneously, and it is unclear how all of these factors are affected by temperature.”

The researchers were surprised to find that while temperature has a significant impact, it caused different fish species to react differently.

In some, the average fish body size got smaller as predicted (around 55% of species), but in others, it increased (around 45%).

In general – but not universally – larger species tended to get even bigger in warmer waters, while smaller species tended to get smaller.

Tropical species were more likely to be smaller at the warm end of their distribution ranges.

Most importantly, the species that were smaller at the warmer edges of their habitat ranges were also more likely to get on average smaller with global warming.

“At Tasmanian survey locations, where some of the fastest rates of warming were observed, up to 66% of species showed clear changes in body size.

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Jimmy Buchan, chief executive of the Scottish Seafood Association (SSA), is in an ebullient but pragmatic mood as he discusses the challenges facing the Scottish processing sector as the final post-Brexit trade arrangements are thrashed-out with the EU.

Never has it been so important for Scottish seafood processors to have the proper cohesive representation provided by the SSA because of the range of hurdles involved in the negotiation, most notably in balancing the expectations of fishermen for extra fishing opportunity and the requirements of processors to have unfettered tariff-free trade with the EU.

As such, the SSA recently launched its ‘2020 Vision’ document, highlighting its key priorities in the negotiations.

Speaking exclusively to Fish Focus in Peterhead, the UK’s premier fishing port, Jimmy Buchan said: “Fundamental to the processing sector will be the continuation of tariff-free trade with the EU and no introduction of non-trade barriers. It is essential that fisheries products are prioritised in the forthcoming negotiations.

“In 2016, the UK exported £1,640 million worth of seafood, of which 71% went to EU countries. It should also be remembered that many fish processing businesses in Europe depend upon supplies of Scottish caught seafood, with places such as Boulogne in France employing around 5,000 people in their seafood sector.

“So, it is very much a two-way process, and we are keen to forge links with EU seafood fish processing associations to help ensure that we can protect and develop this important trade for both sides.

“Of course, Brexit will also bring opportunities for the Scottish seafood sector to export on a more global scale if the right trade agreements are reached with other countries. We also believe there are big opportunities in developing

Welcome for Covid-19 support

Jimmy Buchan, has welcomed the £10m funding package announced by the Scottish Government to support the processing sector during the Covid-19 pandemic.

He said: “We obviously welcome the funding package announced by the Scottish Government as a measure of its intent to support the sector at this time of need.

“Clearly SSA members are keen to learn more of the detail about how the scheme will operate, particularly the eligibility criteria, and we will be engaging with officials on this.”

SCOTS SEAFOOD PROCESSORS OUTLINE VISION FOR THE FUTURE

By Keith Broomfield

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domestic sales to the UK’s vast market of 65 million people.

“The key is identifying all the avenues, and then developing a strategy that maximises the potential market for a quality seafood resource that is in demand both at home and abroad.”

The next few months is all about being prepared for all eventualities, and if cross-channel supply routes suddenly become disrupted, identifying alternative ways of ensuring Scottish seafood reaches EU markets, for example through air-freight or via other ferry routes.

Another area of major concern is Environmental Health Certificates (EHCs) and whether UK seafood exporters to the EU would need to issue them with each consignment – a scenario that would be both costly and time-consuming.

There are other priorities, too, for the SSA – most notably with regards to ensuring there is an adequate labour pool for Scottish processors.

Buchan is adamant that the UK Government’s proposed points-based framework for immigration must take into account the seafood processing sector’s employment needs.

The SSA is also calling for a fit-for-purpose replacement for the European Maritime and Fisheries Fund (EMFF), which will expire at the end of the transition period in December this year.

“We believe strongly that the principles and priorities of the new funding regime must not be hamstrung by damaging limitations such as state aid, so that access to funding for our members is as open as possible to allow continued innovation and development across the sector.”

On the wider implications of Brexit, Buchan sees it as an opportunity for both the Scottish and UK Governments, along with the seafood processors, to do things better, including developing new and more enhanced frameworks, which make Scotland a model for other nations and marketing their seafood sector, identifying areas worth replicating or improving upon.”

He adds: “The SSA is fully committed to driving forward the highest standards when it comes to processes within the sector, with training and certification that give consumers confidence in the quality of our produce.

“The seafood industry is a major contributor to the Scottish economy and our sector has an important role to play in ensuring that we achieve the Scotland Food & Drink Partnerships ambition for 2030 to increase the industry’s value to £30 billion.”

Fundamental to the processing sector will be the continuation of tariff-free trade with the EU and no introduction of non-trade barriers.
Imagine if Scotland had a most incredible natural food resource that was sustainable, affordable to buy, highly nutritious, tasted delicious and was in great demand around the world.

Well, imagine no more, for it is a reality, and the food in question is mackerel; an abundant and sustainably caught fish in our waters, and one which is helping to fly the flag for Scottish food exports, as well as being in good demand in the domestic market.

The importance of mackerel to our food sector is significant and growing all the time, and it is Scotland’s most valuable catch, with UK landings worth more than half a billion pounds annually and supporting many jobs, especially in the processing and support sectors. This really is a fish that has gone from zero to hero, given that only as recently as the mid-1970s the consumption of mackerel in the UK was miniscule, but today there is a wide range of smoked and canned mackerel in retailers, as well fresh fish in season.

Mackerel is a wonderful protein that tick so many boxes, most notably in being extremely healthy to eat. The fillets are packed full of heart-healthy Omega 3 fatty acids (much more so than tuna), and is a great source of essential vitamins and minerals, including vitamins B12 and D. Current health advice is that everyone should be eating fish twice a week, one of which should be an oil-rich species, such as mackerel. Mackerel also represents great value for money and is much cheaper than most other types of fish and meat.

With the world population expected to reach 9.8 billion people by 2050, there has never been a greater need for sustainable, nutritious and affordable protein.

While much of the mackerel export market is for frozen product, it is also a fish that lends itself well to value-added processing, with the taste and texture ideal for smoking, as well as canning. Such is the versatility of mackerel, Scottish fish processors are leading the way in the developing a whole range of innovative mackerel products that is catching the imagination of consumers both at home and abroad – including canned ‘Gin and Tonic’ mackerel. Yes, that’s right – you heard it here first; mackerel in a gin and tonic flavoured sauce, which was specially developed for a Canadian retailer, and which underlines the sheer diversity of opportunities available for developing exciting new mackerel products.

Two Scottish mackerel processing companies – International Fish Canners (Scotland) and Nor-Sea Foods – have been investing heavily in new product development for both canned and smoked fish. It is hard to imagine a more multi-faceted foodstuff when it comes to the range and combination of flavours that work so well with mackerel. This has resulted in exciting new products such as canned mackerel in a range of different flavours, including Korma Curry Sauce, Thai Green Sauce, Sriracha Hot Sauce, Spicy Tomato Sauce, and Hot Smoked Mackerel with Red Pepper and Chipotle Chilli. The impetus behind much of this development has been to further expand mackerel’s market reach from the traditional brine or oil canned accompaniments typically used for sandwiches, salads or for spreading on toast, to actual meal options that can be served warm and partnered with rice or noodles. Such blue sky thinking in product development is essential as we maximise the potential of this fantastic natural resource.

The appeal of Scottish mackerel is also being recognised in overseas markets with exports growing all the time to areas such as North America, Scandinavia and Australia. Indeed, 3 kilo cans of Scottish mackerel in tomato sauce are currently exported to Denmark, where it is a great favourite lunchtime treat for school children, and where it is recognised as being a highly nutritious ‘brain food’. We also believe there is great potential in Asia and other parts of the world for future growth. A positive advantage of canned mackerel is that it is an ambient product that is 100% bacteria free.

The story of how mackerel has gone from a humble fish caught by holiday makers from the end of a pier to become one of Scotland’s great food success stories is truly remarkable. Just as how Scottish whisky and salmon have become iconic, then so too does mackerel have its own important role to play in developing Scotland’s position as a centre of excellence for world food and drink production.

Mackerel, whether fresh, canned or smoked should be part of everyone’s weekly shopping basket for health and affordability reasons, as well as for its great taste. Anyone for gin and tonic mackerel?
HARLEES FISH AND CHIPS TACKLES CLIMATE CHANGE

Harlees Fish and Chips in Verwood, Dorset, have reduced their carbon footprint by a whopping 10.6 tonnes of carbon per year.

The family run business has invested into new frying technology via KFE and solar energy at the Verwood shop on Manor Road, part funded by a grant awarded by Low Carbon Dorset.

The new frying range built and designed by KFE and Kiremko, the market leader in Great Britain for frying systems and ranges. The new range contains high efficiency engineering with a gas efficiency level of 94%, the highest in Europe. These advances in technology also reduce cooking oil waste to up to 40%. The installation of 6 kWp solar panels (PV) to the shop also aids the reduction in the shops carbon footprint, supplying any additional energy to the national grid. These investments have reduced the shops carbon footprint by 10.6 tonnes of carbon per year!

Richard, a Director of Harlees said ‘As a local business we need to do our bit to reduce our impact on our local community and beyond. After 17 years it was time to invest in a new frying range. Not only do these changes help the environment but the efficiencies will also shorten cooking times and increase quality’.
HEALTH

FISH DIET IS GOOD FOR THE BRAIN

According to a recent analysis of data from two major eye disease studies, adherence to the Mediterranean diet – high in vegetables, whole grains, fish, and olive oil – correlates with higher cognitive function. Dietary factors also seem to play a role in slowing cognitive decline. Researchers at the National Eye Institute (NEI), part of the National Institutes of Health, led the analysis of data from the Age-Related Eye Disease Study (AREDS) and AREDS2. They published their results today in the Alzheimer's and Dementia: The Journal of the Alzheimer's Association.

“We do not always pay attention to our diets. We need to explore how nutrition affects the brain and the eye” said Emily Chew, M.D., director of the NEI Division of Epidemiology and Clinical Applications and lead author of the studies.

The researchers examined the effects of nine components of the Mediterranean diet on cognition. The diet emphasizes consumption of whole fruits, vegetables, whole grains, nuts, legumes, fish, and olive oil, as well as reduced consumption of red meat and alcohol.

AREDS and AREDS2 assessed over years the effect of vitamins on age-related macular degeneration (AMD), which damages the light-sensitive retina. AREDS included about 4,000 participants with and without AMD, and AREDS2 included about 4,000 participants with AMD. The researchers assessed AREDS and AREDS2 participants for diet at the start of the studies. The AREDS study tested participants' cognitive function at five years, while AREDS2 tested cognitive function in participants at baseline and again two, four, and 10 years later. The researchers used standardized tests based on the Modified Mini-Mental State Examination to evaluate cognitive function as well as other tests. They assessed diet with a questionnaire that asked participants their average consumption of each Mediterranean diet component over the previous year.

Participants with the greatest adherence to the Mediterranean diet had the lowest risk of cognitive impairment. High fish and vegetable consumption appeared to have the greatest protective effect. At 10 years, AREDS2 participants with the highest fish consumption had the slowest rate of cognitive decline.

The numerical differences in cognitive function scores between participants with the highest versus lowest adherence to a Mediterranean diet were relatively small, meaning that individuals likely won’t see a difference in daily function. But at a population level, the effects clearly show that cognition and neural health depend on diet.

The researchers also found that participants with the ApoE gene, which puts them at high risk for Alzheimer's disease, on average had lower cognitive function scores and greater decline than those without the gene. The benefits of close adherence to a Mediterranean diet were similar for people with and without the ApoE gene, meaning that the effects of diet on cognition are independent of genetic risk for Alzheimer's disease.

FISH OIL SUPPLEMENTS- GROWING DEFICIENCY OF OMEGA-3 FATTY ACIDS AMONG PEOPLE TO CREATE LUCRATIVE INDUSTRY GROWTH OPPORTUNITIES

Albany, New York: Fish oil supplements are gaining popularity these days with the rising awareness about its amazing health benefits. The changing lifestyle and dietary habits of consumers has significantly limited their nutritional intake, which has consequently increased their awareness towards dietary supplements as they exceptionally enhance one’s diet by covering the shortfalls.

Fish oil contains high amounts of omega-3 fatty acids, high protein levels, some important vitamins and minerals, and low saturated fats. Omega-3 fatty acids, eicosapentaenoic acid (EPA) and docosahexaenoic acid (DHA), that are essential fatty acids, therefore are important in the diet. EPA and DHA in fish oil supplements improve heart health by reducing triglycerides, controlling blood pressure, cholesterol levels, and reducing plagues. Fish oil supplements are known to reduce the risk of developing Alzheimer’s disease, reduce inflammation, improve eye health and promote brain health. Currently, Asia Pacific and North America are key regions in the market for fish oil supplements. The demand for fish oil supplements is supposed to increase during the forecast period due to its huge application in the food and pharma industry.

Growing Demands for Fish Oil Supplement Due to Multiple Application in Food and Pharmaceutical Industry

There is a huge demand for food supplements with properties beneficial for health due to the increased preference of health-conscious consumers about having a healthy diet. Fish oil supplements are rich in omega-3 fatty acids and other essential nutrients. Recently, FDA and NIH has advised to have about 2-3 servings of fish per week for its benefits due to omega-3 fatty acids but pulling more demand for fish oil supplements market. People tend to prefer fish oil supplements over including fish servings in diet because of many reasons like disliking fish taste or smell, the time required to prepare the servings, etc. The deficiency of omega-3 fatty acids has led to many health problems like ADHD, asthma, autoimmune disease, and heart risks. Thus there is an increasing tendency of consumers towards consumption of fish oil supplements. Recent studies also have shown the benefit of fish oil supplements for good skin and dental problems as well as muscle gaining and bodybuilding. Fish oil supplement pills are getting more popular these days as consumers prefer them over other forms of supplements. Fish oil supplements are considered safe for consumption but however have minor side effects like fishy mouth, nausea, diarrhea, etc. Bound to all the beneficial factor given by fish oil supplements, a positive growth in demand for these products is expected during the forecast period.

Global Fish Oil Supplements Market: key players

Some of the major players of the fish oil supplements market are Nordic Naturals, Omega Protein Corporation, TASA, Oceana Group, Blueline foods India Pvt. Ltd., AdvaCare Pharma, Nature’s Way Products Inc., Austevoll Seafood ASA etc. More Industrialists and organic product developers showing keen interests in the fish oil supplements as the demand is amplifying every year.

Opportunities for Market Participants

Fish oil supplements are widely used all over the world, mostly for nutritional applications due to its high content of essential omega-3 fatty acids. There is a rise in the number of health problems due to a deficiency of omega-3 fatty acids in America as well as the rest of the world, thus creating a great opportunity for its market. Preference of consumers towards food supplements in form pills over liquid or other forms has dragged the attention of manufacturers more towards launching easy to consume food supplements. Fish oil supplements prove great for bodybuilding and muscle gain, but many consumers fail to reap the rewards. The increasing demand and supply of fish oil supplement all over the world would be estimated to have good opportunities during the forecast period.

Global Fish Oil Supplements: A Regional Outlook

North America is currently leading the and is expected to remain steady in the fish oil supplements market due to popularity, demand as well as good production rate. European Market is one of the large consumers of pharmaceuticals and food supplements has good chances for the fish oil supplements market. Latin America, as well as China and the Asia Pacific, are supposed to have a rapid increase in demand for fish oil supplements which is an increase in awareness among consumers and the promotion done by government agencies. The market for fish oil supplements is expected to increase positively during the forecast period.
Seafood continues to be my favourite source of protein and healthy fats, and I love the variety it allows me.”

Denise Lewis OBE, British gold-medal Olympian, said: “As a former Olympian, I’ve always been committed to maintaining a healthy diet so I can live life to the full and stay fit enough to race around with my kids.

Seafood is continuing with the campaign to highlight the healthy and great tasting seafood caught and landed in the UK. It’s not designed to solve all of the problems the seafood industry is facing. But Seafood hope that offering guidance and support on buying, cooking and eating local seafood will help increase consumer confidence around species they aren’t familiar with.

Over recent weeks Seafood has been working with Defra to evolve and enhance the campaign. The next phase of activity in May and June will have an increased focus on the community element and local industry heroes working hard to feed the nation during these challenging times.

Alongside the campaign, Seafood is also highlighting other UK caught and landed species on Fish is the Dish. And they are helping consumer find out where they can purchase seafood with their Buying Fish is the Dish Facebook and Instagram page: https://www.fishisthedish.co.uk/recipes/sea_for_yourself_recipes

‘Seafood continues to be my favourite source of protein and healthy fats, and I love the variety it allows me.’

‘I’ve always been committed to maintaining a healthy diet so I can live life to the full and stay fit enough to race around with my kids’
VIKTORÍA BECOMES REGIONAL SALES MANAGER FOR SKAGINN 3X

Viktoría Alfredsdóttir has joined Skaginn 3X’s sales team as Regional Sales Manager for Russia and Asia, further expanding the company’s sales network.

Skaginn 3X recently appointed Viktoria Alfredsdottir as Regional Sales Manager for Russia and Asia. Viktoría – a Ukrainian native, fluent in Russian, English, Icelandic and Ukrainian — joins the team as part of an effort to expand the company’s sales network further into Russia and Asia. She will be based at the company’s office in Reykjavik and will work closely alongside the Director of Sales Operations for the area, Pétur Jakob Petursson.

The new addition to the team comes as a result of increased business opportunities in both Russia and Asia. Skaginn 3X recently completed JSC Viktoria, a leading global aquaculture technology and service provider for six years. He previously held a number of senior roles in Aker ASA’s Seafoods, Ocean Harvest and BioMarine divisions.

Trond has also held a number of advisory and non-executive director roles in the industry including as Chairman of the Board of The Research Council of Norway, Oceans Portfolio; Chairman of Marineot Group, which provides solutions to fishery and aquaculture customers; Chairman of the Board of Calanus AS, a biomarine company; and Executive Management Team.

GLEN MO APPOINTED GENERAL MANAGER FOR EGERSUND NET

As from the start of April, Glenn Mo has taken on the role as General Manager for Egersund Net. With his extensive experience from production and service of net products, he will make sure quality and customer service are on top of the company’s agenda, said the company in a press release.

“Being offered the position as General Manager of Egersund Net is a huge vote of confidence. The company has evolved significantly over the years and still has great growth ambitions. After becoming part of AKVA group in 2018, we have gained a valuable network of new colleagues representing a broad range of professions and we now stand better equipped to reach a larger market than ever before,” says Glenn Mo.

Mo will take on the role of General Manager after Geir Henning Risholm, who was ready for a change after nine years in the executive chair. Risholm will now become responsible for the

NEW CEO FOR BENCHMARK

Benchmark has announced the appointment of Trond Wiliksen as Chief Executive Officer. Trond will officially join Benchmark on June 1.

Benchmark is a leading aquaculture supplier of solutions in genetics, health and advanced nutrition. Trond Wiliksen is highly experienced in the international aquaculture and seafood industries, having held senior executive positions in the sector for over 20 years. Most recently he was CEO of SaMar ASA, the Norwegian fish farm company and one of the world’s largest producers of farmed salmon.

Prior to this, he was CEO of AKVA group ASA, the leading global aquaculture technology and service provider for six years. He previously held a number of senior roles in Aker ASA’s Seafoods, Ocean Harvest and BioMarine divisions.

Survitec, a global safety and survival solutions leader, has announced the appointment of Ron Krisanda as Executive Chairman for its worldwide life-saving equipment business.

As Executive Chairman, Krisanda will drive a comprehensive strategic plan to focus on customer needs and profitable growth. In this newly created role, he will lead both the Survitec Board of Directors and the Executive Management Team.

Survitec, a global safety and survival solutions leader, has announced the appointment of Ron Krisanda as Executive Chairman for its worldwide life-saving equipment business.

Krisanda has extensive business experience, including the roles of Chairman, President, CEO and COO across various global manufacturing and service businesses.

He is highly skilled at driving significant operational improvement to achieve financial goals, reach growth targets and create shareholder value. He has experience with both public-traded companies as a corporate officer and with private equity-owned organisations.

NEW CHAIR FOR SALMON EVOLUTION

The annual general meeting of Salmon Evolution has elected Tore A Tønseth, investment vice president at Ronja Capital, as the new chair of the company. Ronja Capital is Salmon Evolution’s largest shareholder.

Tønseth will engage strongly in the company’s continued development, and in what he himself describes as a very solid concept.

“I’m enthusiastic at taking over as chair and to acquiring the opportunity to get involved in the further development of a very good concept in collaboration with the rest of the board and the management of Salmon Evolution,” says Tønseth.

“Kicking off the construction project and further financing of this stage represent one of the big milestones in the time ahead.”

Because conventional aquaculture faces biological restrictions, land-based fish farming will play a key role in the future, he says. “Salmon Evolution has a unique approach to such production, and we believe it has a clearly lower risk profile than many other projects.”

SEAFARERS HOSPITAL SOCIETY APPOINTS NEW CEO

The Seafarers Hospital Society (SHS) has announced the appointment of a new Chief Executive Officer, Sandra Welch, formerly Chief Operating Officer at the Sailors’ Society and Director of their Programme team.

Welcoming the appointment, SHS Chair Peter McEwen said: “We are delighted to welcome Sandra Welch as our new CEO and look forward to working with her over the coming years. She brings a wealth of experience of dealing with seafarers, running projects and managing people, which, together with her strategic approach, made her the perfect choice for the job.”

Sandra will be joining the Society in early May, following the retirement of Secretary, Peter Coulson in August of last year. She joined the Sailors’ Society in 2014 following 18 years in a variety of community development roles at The Salvation Army, both in the UK and abroad.
FISH CURRY WITH CHANA

Inspired by the flavours of Southern Indian cooking, this freshly spiced white fish curry is simple to prepare and packed full of flavour.

**Ingredients**
- 4 x 150g cod chunks- skin on
- 3 tins of chick peas
- 1 tbsp. vegetable oil
- 2 tsp. water
- Coriander – 2 handfuls chopped
- 100ml natural yoghurt
- 2 cloves of garlic
- 2 tsp. garam masala
- 1 tsp. ground coriander
- 3 tbsp. chat masala spice
- Alternative fish: haddock or hake

**Method**
1. On a medium heat, fry off onion, garlic, and coriander stalks in vegetable oil until the onions are soft but not browned.
2. Add the garam masala, ground coriander and chat masala spices and cook for 5 minutes.
3. Add two tins of chickpeas and water to the pan.
4. Bring to the boil and then simmer for 20 minutes adding water if it starts to dry out.
5. Using the back of a wooden spoon, drain and crush the remaining chickpeas. These will be used to thicken the sauce.
6. When the chickpeas are soft, add the cod, skin side up.
7. Cook for a further 12-20 minutes.
8. Lift the cod out so that it does not overcook and sprinkle the remaining chopped coriander.
9. Serve the sauce into a bowl and place the cod on top. Serve with a spoonful of natural yoghurt and chopped coriander leaves.

Salmon and Sweet Potato Soup

Hearty and warming salmon and sweet potato soup – the perfect comfort food for cold winter days. Takes minutes to prepare and half an hour to cook.

**Ingredients**
- 2 onions
- 2 bay leaves
- 2 cloves
- 2 medium / large sweet potatoes
- 4oz of fresh salmon
- 4oz of Scottish smoked salmon
- 300ml double cream

**Method**
1. Finely chop the onions.
2. Sweat down with butter on low heat, add the bay leaves and cloves.
3. Peel and chop sweet potatoes into bite size pieces.
4. Bake these in the oven until soft, roughly 20 minutes.
5. Chop all the salmon into bite size pieces.
6. Once onions are soft, remove the bay leaves and cloves.
7. Add the softened sweet potato.
8. Add cream and simmer on low heat for 10 minutes.
9. Add the salmon.
10. Season to taste.
11. to thicken, add cornflour or a mixture of flour and water.
12. to make thinner, add milk.
13. We think our salmon and sweet potato soup is delicious. Add some chopped chives and serve with crusty bread, bon appetit!

HERRINGS IN CRISPY OATMEAL AND MUSTARD SAUCE

Herrings in crispy oatmeal with mustard sauce, a great light lunch, healthy and quick to make.

**Ingredients**
- 4 herrings, filleted
- 60 ml (4 tbsp) milk
- 15 g (1 tbsp) seasoned flour
- 1 egg, beaten
- 50 g (2 oz) coarse oatmeal
- oil for frying
- lemon wedges

**Mustard Sauce**
- 12 fresh scallops
- Juice of 5 limes plus zest of one
- Handful cherry tomatoes
- 1 red onion or bunch of spring onions
- 1 ripe avocado
- 1 bunch fresh coriander
- 1 chilli pepper
- Olive oil
- Salt & black pepper

**Method**
1. Four herring fillets
2. Steep the herring in the milk for about half an hour, drain and dip in seasoned flour.
3. Dip the fish in beaten egg and then coat generously in coarse oatmeal.
4. Shallow fry in hot oil, stomach side down first, until crisp and golden on either side.
5. Serve with wedges of lemon and Mustard Sauce.
6. The perfect Herrings in crispy oatmeal with mustard sauce recipe

Scallop Ceviche

Refreshing exotic and there’s no cooking required either

Scallop Ceviche – Prep time: 55-60 minutes Cooking time: 0 minutes Servings: 4 Skill level: Easy Peasy Recipe by: Seafish

**Ingredients**
- 12 fresh scallops
- Juice of 5 limes plus zest of one
- Handful cherry tomatoes
- 1 red onion or bunch of spring onions
- 1 ripe avocado
- 1 bunch fresh coriander
- 1 chilli pepper
- Olive oil
- Salt & black pepper

**Method**
1. Get some really fresh scallops.
2. Thirly slice and cover in the juice of three limes with some seasoning.
3. Allow to cure in the fridge for several hours.
4. Finely chop the tomatoes, spring or red onion, avocado, chilli and fresh coriander.
5. Drain the scallops.
6. Combine the scallops and the tomato mixture with the juice of another two limes and a teaspoon of olive oil.
7. Season and serve garnished with lime zest, fresh coriander and pair with crusty bread.
CRS produce high quality blast freezers and cold stores suitable for the storage of fish & seafood. Available in a range of sizes with features to suit your individual needs, our cold stores are a key component in the seafood cold-chain.

Like most produce, it is essential for seafood to be quickly and permanently frozen from the time of being caught and processed to the time it is purchased by the consumer.

Here at CRS, we meet the needs of the fishing industry through a range of features specifically designed to allow maximum efficiency through-out your cold storage solution.

New and refurbished equipment is available to rent or buy with unbeatable pricing for hire periods of six months and up.

Call 0800 085 2298 for a free, no obligation quote. We’ll have you hooked on value!

“"I am extremely happy with the service we received from CRS. I would not hesitate in using CRS again in the future or recommending them to anyone looking for a temperature controlled storage solution.""

David Ellis, AM Seafoods