# ICELANDIC INTERIES FISHERIES

ICELANDIC FISHING INDUSTRY



## **A MESSAGE FROM THE MINISTER**

The Icelandic fisheries sector has come a long way over the past 30 years. From a position of fishstocks, weakened by a long period of mild overfishing and a poorly organised sector with



poor economic performance, Iceland has achieved the position of strong and sustainably managed fish stocks as the foundation of a well organised and profitable fishing industry.

The key to success is well managed fisheries for conservation and sustainable use. Thus responsible fisheries are the foundation for all other elements of fisheries success. The Icelandic approach is to set the annual total allowable catch based on scientific advice and distribute annual catch allotments to fishing vessels based on long term vessel quota shares in an individual transferable quota fisheries management system (ITQ system).

This management approach has eliminated the destructive race to fish that plagues sustainability and profitability in many fisheries, thus allowing industry operators to plan their operations for the entire year based on their known and secure fishing oportunities. This allows the industry to better serve its customers and meet market needs in the short and long term.

This approach to responsible, long term fisheries management has had a profound effect on fishing industry culture in Iceland. Now the key to all thinking and operation is value generation instead of sheer volume. With the race to fish having been eliminated, investment in fishing vessels focuses on achieving the best handling and treatment of the catch for maximum freshness and quality for the consumer. This new culture, enabled by better fisheries management, has created oportunities for research and innovation, product development and technical progress in general.

All of this has resulted in a very different fishing industry compared to 30 years ago. Now we see an advanced, flexible and adaptable market driven industry, generating and employing new technology and providing new and diverse products. Jobs in the industry are also very much changed, with emphasis on recruiting highly qualified, well educated young people for careers in the fishing industry. In this setting, the aim is to use every part of the fish to produce high value products-not just the tasty fillets but also cuttings, skin, etc. Examples of products thus available include wound dressings and pharmaceuticals made from fish skins and cosmetics created from crustaceans shells.

But despite increasing success over the past decades, future challenges are many. We must remain vigilant to ensure continued sustainable harvesting. We must maintain and expand our market position with high quality products. We must continue to generate new products suitable for ever-changing times. And we must improve our position on international markets. The key to success will remain responsible and well managed fisheries with secure fishing rights, allowing the continuation of responsible and profitable fisheries.

Sigurður Ingi Jóhannsson

# MADE IN ICELAND

ROTEX NO ICE REQUIRED DURING TRANSPORTATION

## **SUB-CHILLING**

Reduces carbon footprint

• Extended rigor mortis period



Comparison after pin bone removal

Longer shelf life

- Widens logistic options
- Increased delivery stability

reduces packed weight



No gaping



Skaginn and 3X Technology are leading companies in designing and developing food processing equipment.

• Fresh product packed in sub-zero temperature



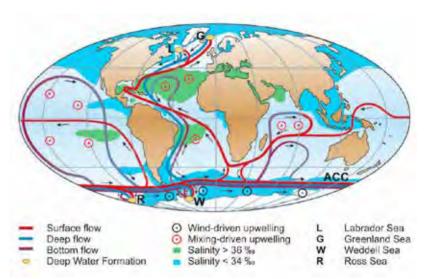
# DISCOVERING THE OCEAN'S WONDERS

A revolutionary tagging of Humpback whales premieres in January 2017

n Iceland, a truly revolutionary tag is being developed that will be put on Humpback whales to allow mankind to follow these great creatures on their journeys through the oceans. Humpback whales are truly global citizens, so whales across the seven seas will gather new, groundbreaking information, monitoring the ocean for mankind. The first whales are being tagged this year but the 'globalpremiere' of the project will be in January 2017.

This plan was revealed at the Arctic Circle Conference in Reykjavik in October last year; the largest international gathering on the Arctic with more than 1500 participants from 50 countries attended by the President of France, Francois Hollande, and President of Iceland, Ólafur Ragnar Grímsson.

The Icelandic high-tech company Star-Oddi is producing the tags for the international company Lifriki. Star-Oddi,



#### Currents of Earth.

The ocean dictates the weather and deep water formations are of special interest, the yellow spots. The areas of deep water formations are frequented by the whales. Scientists hope to better understand this phenomena through the tagging of the great Humpback whales.



President of France, Francois Hollande and President of Iceland, Ólafur Ragnar Grímsson at the Arctic Circle Conference in Reykjavik.

www.icelandictimes.com



Edu-games and apps for children.

which is a leading international company in the tagging of animals on land and sea, was founded in 1985. Lifriki was founded

in Iceland around the tagging concept, with offices in Iceland and Denmark and has now become a global company.

#### The wonders of the ocean

Data from the tags on Humpback whales will teach mankind about the wonders of the ocean as they travel through the deep on their migration between their feeding and mating grounds-basically from the polar areas to warmer climates, travelling enormous distances.

The public, including schoolchildren, will be able to follow their whales. In doing so, the whales will connect mankind to their underwater worlds, their lives and relationships. As a result of the groundbreaking tags, it will be possible to join the whales on their trans-boundary adventures.



The Humpback whales have caught the imagination of people all over the world with their breaching.

In an age of endless information, it is hard to believe that there are places in the world which man knows virtually nothing about. Yet close to 95% of the world's oceans remain

unexplored. Though explorations have taken man to the moon and mankind continuously strives to explore more of the universe, the oceans remain relatively unknown. -JG

## FRESH, SUSTAINABLE FISH

Fishland is a Revkiavik-based company that delivers Icelandic fish worldwide.

Tceland is surrounded by some of the Lbest fishing waters on earth as a diverse range of fish species breed in the clean and vast North Atlantic Ocean. Fishland is a local company that was founded in 2014 by Kjartan Andrésson, a man with an impressive background in the fishing industry. "A lot of the other guys selling fish abroad are salesmen," says Kjartan. "I owned a fish store and I was a sailor, so I know how to cut, process and prepare the fish. I have a strong background in fishing." Fishland's main emphasis is on delivering fresh fish, caught in a sustainable manner in the Atlantic Ocean, to worldwide markets. Fishland is growing quickly due to its owner's experience and unrivalled customer service.

#### **Choose Iceland**

Fish is the lifeblood of Iceland, sustaining its inhabitants and the source of the country's biggest trade resource. Iceland has an extensive history in fisheries management and is considered a leader in the industry. The country is known for focusing on the sustainable use of fish stocks and its careful treatment of the local marine ecosystem. Responsible fisheries are the prerequisite for the Icelandic fishing industry continuing to be a mainstay of the Icelandic economy and a pillar in its exports. Fish species found in Icelandic waters include cod, haddock, Arctic char, herring, halibut, monkfish,





catfish, plaice, ling and mackerel, among

Fishland sells fresh cod, haddock, cod cheeks, cod loins, Arctic char, halibut, monkfish, catfish, redfish, plaice, and skate. As for frozen fish, Fishland sells cod, haddock, mackerel, and scampi. Plaice has been one of Fishland's biggest sellers in the international market in recent months.

#### **Growing Market**

Fishland currently sells fish to cities in Canada and the United States. "The first city we sold to was Edmonton in Canada," says Kjartan. "We are also selling fish to

New York, Washington D.C., and Denver." Fishland partners with Icelandair Cargo and Cargo Express to securely ship its fresh fish products abroad. Other cities of interest include Chicago, Vancouver, Los Angeles, Seattle, and Portland, Oregon. "We are a small company, but we have great contacts. We focus on personal service and we are growing quickly," says Kjartan. The future looks bright for Fishland. - 16



## THE MOST IMPORTANT **FISHING NATION** IN EUROPE

sustainability.

Iceland is home to one of the most modern and competitive fishing industries in the world, based on protection of the marine ecosystem and a sustainable harvest. Fishery continues to be one of the strongest sectors of the Icelandic economy, making it responsible for a large share of both the GDP and the nation's export revenue. Iceland, which is a small country with just 330,000 inhabitants, is undeniably one of the world's leaders in total fisheries but has, in recent years, also become a leading country in the advancement of marine technology, fish detection instruments, while maintaining a sophisticated fishing 94 million tons, most of which was caught sector, exporting world-class produce in Asia and Africa, followed by Europe. In

ishing is one of the pillars of around the world. It's difficult to overstate Iceland's economy, and the the importance of fish to Icelanders. country is a leader in fishing Throughout the centuries, it has been the backbone of the nation's economy, both as its chief food supply and its main export product. Historical evidence suggests that Icelandic fish export dates back to the 12th century at the very latest, so Iceland has centuries of experience.

#### Economic Im pact

The fishing industry is one of the main pillars of the Icelandic economy. According to data released by Statistics Iceland, Iceland is the most important fishing nation of Europe. In 2013, the total catch by Icelandic fishermen was 1,362,790 tons. At the same time the total world catch was

that year Iceland was the second largest fishing nation in Europe after Norway, and the 18th largest fishing nation in the world. China was the largest fishing nation in the world in 2013.

Iceland's fishing industry is one of the key industries in Iceland, and directly employs around 9,000 people, or approximately 5.3% of the total workforce on the island. In 2012, the fishing industry contributed 11% to the GDP directly, and 25% if account is taken of the indirect effects of the ocean cluster. Additionally, in 2012 the export production of marine products amounted to ISK 269 billion (€ 1.7 billion), an increase of 6.8% over the previous year and of 11.4% in quantity, a total of 749,000 tons. Frozen products generated 53% of the value of exported marine products, and marine products

account for approximately 42% of total export value.

Iceland's exclusive fishing zone has an impressive area of 760,000 square kilometres, seven times the area of Iceland itself. Some of the largest fish stocks in the North Atlantic are found within Icelandic waters, including halibut, haddock, and cod, which is Iceland's most important stock.

#### Management System

The Icelandic fisheries management system was put in place to ensure responsible fisheries, an important issue for the country. The fisheries management in Iceland is based on extensive research on fish stocks and the marine ecosystem, and decisions on allowable catches for quotas are made on the basis of advice from the

Icelandic Marine Research Institute. Catches are then monitored and enforced by the Directorate of Fisheries. These are the main pillars of the Icelandic fisheries management intended to ensure responsible fishing and the sustainability of the North Atlantic Ocean's natural resources.

Rapid advances in Icelandic fisheries have been accompanied by the development of manufacturing and service industries that draw on long experience of the practical needs of fishing and fish processing operations. The fishing fleet is equipped with advanced technology and the same is true for the processing facilities on land. Among the leading fields are software, electronic and digital equipment, as well as land-based weighing and process control. A wide selection of packaging for handling the storage and retailing of fresh

Photo: Friðþjófur Helga

and frozen products are made in Iceland, as well as trawl nets, safety equipment and protective clothing. Icelandic manufacturers have designed and installed many processing plants around the world for companies ranging from vessel owners to industrial food processors.

Sustainable and responsible harvesting of wild fish stocks in Icelandic waters and good treatment of the marine ecosystem is of fundamental importance to Iceland. The fishing industry in Iceland is meeting the demands of buyers for sustainable use of marine resources with the Iceland Responsible Fisheries programme, developed on the basis of commitments made through national law and international agreement. Iceland's fishing industry is thriving and remains one of the most important in Europe. -JG

## THE BIOECONOMY IMPACTS EVERYONE

Matís is an Icelandic Food and Biotech R&D company

Matís specialises in value creation within the bioeconomy and the development of policy and infrastructure.

The bioeconomy plays a big role in the Icelandic economy and Matís is at the forefront of research and solutions within the bioeconomy. Internationally, the bioeconomy is viewed as a key element in battling major societal, environmental and economic challenges, including climate change, food security and resource efficiency.

The bioeconomy includes all biological resources that can be found in the oceans, pastures, wildernesses, forests and freshwater, and their conversion into food, feed, biobased products and bioenergy via innovative and efficient technologies.

The focus put on the bioeconomy within European research programmes has the ultimate goal of keeping Europe competitive and prosperous by providing sustainable and inclusive economic growth and jobs, and by meeting the needs of a growing population while protecting the environment and natural resources.

Matís, an independent, governmentally owned company founded in Reykjavik



in 2007 following the merger of three former public research institutes, provides research and development for the food and biotechnology industries. Matís' vision is to increase the value of food processing and food production, through research, development, dissemination of knowledge and consultancy, as well as to ensure the safety and quality of food and feed products. "What we do is to help strengthen the bioeconomy," said Sigrún Elsa Smáradóttir, the research group leader at Matís. "In Iceland, the bioeconomy is largely based on fisheries and marine resources, and we believe it can extend further."

Bioeconomy refers to the part of the

economy that is based on renewable bioresources. By strengthening the bioeconomy, increasing production of bio-based fuel, chemicals and materials, sustainably sourced and produced, is an alternative to our heavy reliance on finite fossil fuel resources. "In biorefineries, we are looking at replacing fossil fuel based chemicals with renewable bio-based chemicals," she said. "Global industries are largely based on fossil fuels and carbon-based chemicals. There needs to be a shift to renewable sources going forward." Today, the European bioeconomy is already worth more than €2 trillion annually and employs more than 20 million people, often in rural or coastal areas.

#### Leading role, diverse projects

Matís has played a leading role in several large international projects within the EU Framework Programmes and Horizon 2020. Representatives of Matís have participated in the European, Nordic and West Nordic bioeconomy panels and the International Advisory Committee for the Global Bioeconomy Summit. Matís also plays a role in the development of an Icelandic bioeconomy strategy.

One recent project, 'Arctic Bioeconomy II-Biotechnology', researches feasible biorefinery feedstocks available in the Nordic region and opportunities to create multiple value streams from those resources. "One way to enhance a bioeconomy is to utilize the resources that are already being utilized, and to look at different value streams," said Sigrún. "As an example, fish skin has, in the past, been looked at as waste, but it can be utilized in many ways. It can be processed directly and used in fashion clothing or into skin and tissue repair medical products. It is also possible to isolate chemicals and proteins from the remaining fish skin and the leftovers can be processed for feed and biofuel."



Sigrún Elsa Smáradóttir.

#### **European Bioeconomy Panel**

The European Bioeconomy Panel was created in 2013 by the European Commission. It consists of 30 members and Hörður G. Kristinsson, the Chief Science Officer at Matís, is one of its members. The Bioeconomy Panel was established to answer the Europe 2020 strategy calls for a bioeconomy as a key element for smart and green growth in Europe. Matís, however, wants to highlight the importance of talking about both the green and blue growth. Blue refers to the marine and freshwater environment and is of particular importance to Iceland and our neighbours sharing the Atlantic Ocean's resources and holds great untapped future potential for sustainable utilization and added value.

#### **Reaching beyond Europe**

Matís has participated in numerous programmes with governments and developmental aid funds. For instance, outside Europe, Matís worked with the Tanzanian government to improve fisheries in Lake Tanganyika, provided courses and consultation for the Kenyan government on quality issues for fish, the treatment of the catch, and fish processing methods and packaging. And, last but not least, Matís participates in the United Nations University Fisheries Training Program (UNU-FTP) where Matis has handled the programme concerned with specialist training in quality management of fish handling and processing.

#### World Seafood Congress

Matís will host the World Seafood Congress 2017, held for the first time in Reykjavik, Iceland. The theme of the conference will be "Growth in the Blue Bioeconomy", focusing on a practical approach and cutting edge research for market innovation, safe seafood supply and food integrity.

#### Dedicated employees

Matís employs about 100 individuals in offices, laboratories and Food Innovation Centres and operates in eight locations around Iceland, headcounters being in Reykjavik. Employees include many of Iceland's most forward-thinking scientists in the fields of food technology, food research and testing, and biotechnology; food scientists, chemists, biologists, engineers and fisheries scientists. Several employees hold associate positions within Iceland's universities, while many Ph.D. students conduct their research at Matís in collaboration with the industry both in Iceland and abroad.

The bioeconomy might not be a panacea for all of society's challenges, but it is an important piece of the puzzle in creating a more sustainable future where resources are used in the most efficient way. *-JG* 



sisheries Iceland was established in 2014 to increase value creation from Iceland's fishing resources. Iceland's fishing industry is a competitive, exciting industry with high demand for professionals from diverse backgrounds, education and experience. Some of the island's best and brightest work at the organization.

Fisheries Iceland safeguards the interests of its members and functions as Iceland's association of companies involved in the fishing industry. Fisheries Iceland aims to get young people excited about the country's dynamic fishing sector. The aptly named Hnakkabon aims to do just that.

#### Hackathon, Icelandic style

In order to get young people excited about Iceland's fisheries, the organization teamed up with Reykjavik University to sponsor the 'Hnakkabon', a play on the term 'hackathon'. Students were challenged to find ways in which the Porbjörn hf fishing company could excel in terms of sustainability and environmental management. They were directed to conduct an analysis of the company's operations aimed at reducing waste and emissions and to develop suggestions for improvement that will also enhance Porbjörn's efficiency and competitive advantage.

"Icelandic fisheries can be technical and complicated, but it is an exciting business," stated Karen Kjartansdóttir, Information Officer at Fisheries Iceland. "The Hnakkabon allows students to consider the entire value chain of the fish industry and how businesses can be more efficient."

#### Winning Team

Teams were split into groups of five. The students had different educational backgrounds ranging from business to environmental studies to law and engineering. "They had two days to think about the relevant problems and to come up with solutions," said Karen. The judges were Ari Kristinn Jónsson, president of the university, Björgólfur Jóhannsson, CEO of Icelandair, Gylfi Sigfússon, CEO of Eimskip, Sólveig Arna Jóhannesdóttir, Sales Manager for HB Grandi, Arni Finnsson, chairman of the Iceland Nature Conservation Association, Heiðar Hrafn Eiriksson, director of Þorbjörn, Ketill Berg



to address challenges in the fish industry.

diverse jobs that Icelandic fishing offers and trigger new ideas from Reykjavik University students. "The students approached their task with flying colors and the suggestions made were both diverse and very useful,' said Ari Kristinn Jónsson, the president of Reykjavik University. "It was a tall order for the jury, but in the end, the result was nevertheless unanimous."

#### Fisheries Iceland-Diverse Work

Fisheries Iceland merged two former associations in the fishing industry of Iceland, The Federation of Icelandic Fishing Vessel Owners and the Federation of Icelandic Fish Processing Plants. The organization has 19 board members and 12 full-time employees dedicated to Iceland's fishing interests. In addition to providing information and representing the industry, Fisheries Iceland also provides an Iceland Responsible Fisheries logo that indicates Icelandic origin of fish catches in Icelandic waters and responsible fisheries management. The logo provides opportunities for stakeholders in the value chain of Icelandic seafood to highlight Icelandic origin.

"The fishing industry is complicated with a lot of moving parts," said Karen, "But, we take great pride in the industry and we want to educate others about what we are doing. The Hnakkabon is a great way to get young people in Iceland interested and to inform others."

**Fisheries Iceland** lorgartún 35 • 105 Revkiavi +354 591 0300 🞽 info@sfs.is

Hrönn Vilhjálmsdóttir. "The prize was a flight to Boston for the World Seafood Congress and US embassy staff members will introduce the winners to influential people in the industry," said Karen. "The US embassy is really interested in the Hnakkabon and it is so nice to work with them."

Working in Icelandic fisheries is a complex profession requiring great expertise and professional staff. Among the subjects involved are fishing, food processing, marketing, innovation, technological development, transport, research, the environment and much more. The objective of Hnakkabon is presenting students with countless opportunities for innovation and



Magnússon, director of the Icelandic Center The winners were Guðjón for Corporate Social Responsibility and Guðmundsson, Ingi Svavarsson, Hjálmar Karen Kjartansdóttir, for Fisheries Iceland.

Óskarsson, Margrét Lilja Hjaltadóttir and

Smári

-IG

# POISED FOR<br/>POISED FOR<br/>POISE

▶ ish farming is a growing global industry, **F** and Vaki Aquaculture Systems is at the center of it all. Vaki, a dynamic Iceland-based company, specializes in manufacturing and developing equipment for fish counting and size estimation for fish farming businesses around the world. The company, which celebrates its 30<sup>th</sup> anniversary this year, exports its products to more than 60 countries, with particular focus on Norway, Scotland, Chile, Canada and Mediterranean countries. Vaki works with companies that have industrialized fish farming businesses using modern fish farming techniques. Companies that use Vaki's equipment process a wide range of fish species including salmon, sea bass,



Vaki has an impressive and diverse product line that can accommodate businesses of all sizes

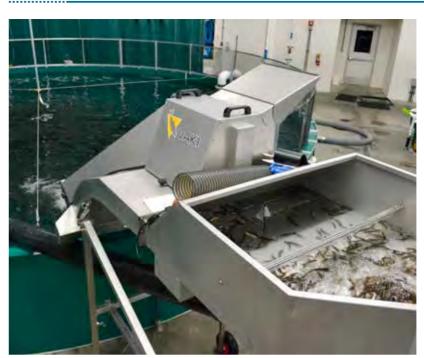
tilapia, carp, white fish, and flatfish, among others.

While headquartered in Iceland, Vaki has a worldwide reach with offices in Norway,

Scotland and Chile. The dedicated staff of more than 50 people work tirelessly to ensure that each product manufactured meets the strict standards set by management, and that customers can reach staff at a moment's notice. "It's important to have sales and service agents around the world to provide the best service possible," says Benedikt Hálfdanarson, managing director of Vaki.

#### **Diverse Product Line**

Vaki has an impressive and diverse product line that can accommodate businesses of all sizes. The company manufactures an extensive range of counters that count fish from the hatching stage to harvesting. The products can count a wide range of fish



Service and support are a core part of Vaki's business model that doesn't end once a purchase has been made.

species from 0.2 grams to 12 kilograms. Other products handle tasks including grading, splitting, moving and delivering fish stocks. Another of Vaki's strengths is their technology, including infra-red camera-based and imaging software technology that puts Vaki counters above its competitors.

Vaki's management team has chosen to specialize on select products to ensure quality and the best approach for each need, instead of offering every type of fish farming equipment. "Fish counters are the heart of the company and we strive to be the best at that, to be a leader in the industry," says Benedikt. "We are loyal to our focus and are determined to work at what we are best at."

#### Unrivaled Training and Customer Service

Service and support are a core part of Vaki's business model that doesn't end once a purchase has been made. The company prides itself on its professional level of support when it comes to the service and maintenance of its suite of products. Company employees train equipment users to maximize performance and productivity, increase in-house expertise, and ensure that all users have the proper qualifications to take responsibility for improving production. Training is delivered during a time and location that is most convenient to the customer. Vaki also offers customers an online service contract and continued aftersales support. "It's important to note that the relationship does not end at the sale," says Benedikt. "We nurture relationships with customers, and are available for questions, maintenance, software issues and add-ons."

#### **Positioned for Growth**

The company is committed to innovation and development and Vaki will continue to act as a leader in this growing industry as a trusted manufacturer and advisor to its customers.

One market that continues to be of interest with the possibility of strong growth is Asia, with a particular focus on China. Indeed, China is the biggest fish farmer in the world and, as Chinese companies continue to modernize, business owners are looking for the type of equipment that Vaki provides. Other Asian countries that are potential markets are Japan, Philippines, South Korea, Thailand, as well as Middle Eastern countries like Iran, Israel and Saudi Arabia.

#### Numerous Accolades

Vaki is a healthy, profitable company that has been recognized for its success. In 2015, Vaki was named one of the strongest companies in Iceland by CreditInfo, for the fifth year in a row. Vaki was amongst the 1.7% of Icelandic companies that have achieved the requirements for this accreditation. Additionally, in 2009, Vaki received the President of Iceland's Export Award for achievement in the exporting of Icelandic products and services to overseas markets.

The fish farming industry is a growing worldwide business and the future looks bright for Vaki. -JG





# 1,000 YEARS OF FISH

A small fishing village has turned into an export hub

Fishing is in the blood and heritage of the Vikings of Iceland. Starting out as a small settlement founded by one of the first settlers, Molda-Gnúpur, in about 934, Grindavík has been in the fishing business for over 1,000 years. With rich fishing grounds not far from shore, for many years small, open boats set out to bring in a catch.

However, fishing around Iceland is not for the faint-hearted. It's coasts are famous for their rich fishing grounds and notorious for their tumultuous seas and shipwrecks. As fishermen across the world know, their profession is a dangerous business and the price of fish could be measured in men's lives. With no real harbour, and the very powerful, rough seas to contend with, many lives were lost over the years. The cry, "Row for



your lives!" meant just that, as the tired fishermen tried to beach their boats on the shore. The broken remains of a trawler, tossed almost 100 metres inland, gives an idea of the powerful forces at work here.

At the end of the 19<sup>th</sup> century, the village population numbered just about 360. They had endured great hardships, including the plague and attacks by Algerian pirates, not to mention the harsh weather and major volcanic eruptions.

The lure of a rich catch of cod, much of which they sold as saltfish, or bacalao, to Mediterranean countries, where it is still very popular today, was what kept their hopes and economy alive.

It was not until a safer harbour was built by hard, manual labour in the  $20^{th}$  century, that conditions changed dramatically. The introduction of powered



fishing vessels of different sizes once again transformed the lives of the fishermen. Also, the introduction of compulsory seamen's training led to a dramatic fall in the number of lives lost, while at the same time, boosting catches.

Further improvements to the harbour and now a very modern fishing fleet, supported by cutting-edge technological advancements has dramatically increased both the numbers and quality of the fish caught. The introduction of the Iceland Responsible Fisheries programme and the 760,000 square kilometres of the Icelandic exclusive fisheries zone has brought the country a protected, sustainable fishing area that has stopped the decimation of fish stocks through overfishing around the country by many other fishing nations. Today Grindavík's harbour is one of the safest in Iceland and gets around 2,500-3,000 landings that provide over 40,000 tons of fish per year. The latest addition to the catch is the Blue fin tuna-the most expensive type of tuna fish that is becoming successful in Iceland.

Proximity to the international airport at Keflavik means that fish caught one day can be on a restaurant table in New York or Italy the next day. That freshness makes a palpable difference in taste. Naturally, there are top class restaurants in the town itself where visitors can enjoy that day's fresh fish catch for dinner, cooked by world-class chefs—a full dining experience with their international menu, supported by a full range of wines and spirits. It makes a great stop and a memorable way to remember Iceland especially before heading to the airport for a flight home.

The opportunity to see a fishing village in action today is a big draw for tourists who can see the fleet sail in and unload on the quayside. They can also observe the processing and packing taking place in a factory or enjoy a soup at the small fishermen's café on the harbourside whilst watching the activity.

Just 3km down the road from the famous Blue Lagoon that formed as an outfall from the geothermal power plant built following the 1973 oil crisis, the small town still has the air of a quiet village. Now grown in size to over 3,000 inhabitants, it has numerous sport teams and a wide range of activities to enjoy. Hotels, such as the new Geo Hotel, guesthouses like Borg and a wellequipped camp site provide popular accommodation options for those wishing to enjoy the Reykjanes peninsula.

This vibrant community is today home to 29 companies directly involved in fishing, fish processing and packaging and a further 15 who provide services to the industry from nets to fuel, from transportation to technology—not to mention other tourist services. Their shared commitment to quality service permeates every aspect of their society. This is what has turned a small village into one of the most important centres of the fishing industry in Iceland. -ASF



Chinese Ambassador, Zhang Widong, in the Icelandic Times headquarters, declares his approval of the Chinese magazine to Edda Snorradóttir, Project Manager of the Icelandic Times and Einar Th. Thorsteinsson, the company's Managering Editor and Publisher.

## **ICELANDIC TIMES EXPANDS FURTHER IN CHINA**

The first issue of the Icelandic Times was printed and distributed in China more than a year ago, in November 2014. Expert Chinese speakers translated the content of the English issue into Mandarin Chinese. Printed in China, it is the only version of the magazine distributed there. In

addition, it is also distributed directly throughout the country.

The Icelandic Times has been very well received in China. The third edition has been released and as before, its subjects are tourism, culture and business. The magazine is now well-

established in China, and aims to to five thousand travel agencies expand further in the coming months.

There has been a significant increase in the number of tourists from China visiting Iceland over the past few years. In 2014 the increase was around 50% compared to the year before. In 2015, there

was an 80% increase compared to 2014. Likewise, Icelanders have also been looking increasingly to China, both as a tourist destination and for business connections. The possibilities for innovative Icelandic business are virtually endless in China, given the size of its market. Bilateral relationships between China and Iceland in the various economic sectors increased as both individuals and companies have become more engaged in the process.

Given these circumstances, it's therefore no surprise that the Chinese edition of the Icelandic Times has become popular. It is available in both print form and on the Internet at www.icelandictimes.cn.

#### Important partnerships in China

With the next issue, the Icelandic Times enters a new field. The paper will be dedicated to fishing, the fishery industry and food relating to it. There are about 5,500 companies that belong to the Chinese fishing and food industry organisations and the magazine will be developed in close cooperation and collaboration with them.

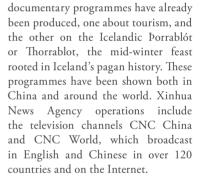
The Icelandic Times is also working together with the Chinese State News Feed, the Xinhua News Agency. Two



Iceland's Prime Minister, Sigmundur Davið Gunnlaugsson, reading the Icelandic Times, with Einar Th. Thorsteinsson, the magazine's publisher.



Karl Lúðvíksson, Sales Manager for the Icelandic Times, will be overseeing the sales for the new Fishery magazine in China.



#### The need exists

The introduction of Iceland as a tourist destination has had a considerable impact in China. The Icelandic Times has played a role in this. The aim of the magazine is to contribute valuable information to foreign travellers who visit Iceland, including its topography, Icelandic culture, history, nature, and the services available so that their visit to Iceland is as enjoyable as possible. Therefore, it is important that information is provided in the language the visitors speak.

In addition to the Chinese version, the Icelandic Times is also published in English, French and German. The English version was introduced in 2009 and is published five times a year. The first editions in French and German were published in 2012, and come out once a year.



Ragnheiður Elín Árnadóttir, Minister of Industry and Commerce, a strong supporter of the Icelandic Times magazines.

## ALL NATURAL STORAGE

Natural White finds solutions for protecting raw materials.





Johannes Arason, Jon Aki Bjarnason and

**Dedicated**, **Experienced Staff** 

Gudni Bjornsson have a combined 120 years of experience in the food industry, working with fresh fish, chicken, lamb and other proteins. Johannes has more than 50 years experience as a food technician, while Jon Aki operates the largest canning factory in Iceland, and Gudni has expertise in selling and producing dried fish both in Europe and the United States. "We are working with businesses around the world," said Johannes. "Our experience and knowledge helps businesses find solutions and we are a strong team together." - JG

Image: Second system
Natural White

Framesvegi 19 - 230 Kellavik

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Image: Second system

Image

Natural White is a dynamic Icelandbased company that focuses on developing natural methods to protect raw materials before processing. Johannes Arason, who developed the flagship

Natural White product, leads the company, which has been operating since 1991. Natural White is a spice/salt solution that binds with protein on cut surfaces, which in turn binds the cellular water. The product eliminates drip loss, keeps the cells turgid and provides an improved texture and quality to buyers. Natural White is made from rosemary full extract (Rosemary oleoresin) and weak mineral salt brine solution.

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#### **Groundbreaking Product**

The Natural White formula, which is 100% natural, was first tested on fish products in New Zealand and the results were undeniable. Not only did the fish remain whiter, it held its flavor, and the texture was much improved over the control samples,

and the improvement in yield was obvious. Over subsequent seasons, additional trials were conducted on fresh and reprocessed fish of the many species available in New Zealand, with positive results. Those trials extended to the production and export of some salted cod and ling and the production of cod and Hoki fillet block.

#### New Focus

In 2011, there was a major change at the company when the main focus shifted to the handling of raw materials, fresh and frozen. A new method was developed to under-cool white fish, cod, haddock, pollock, catfish, and other fish species. The method allows raw materials for fresh and frozen processing to be stored from 12-72



Johannes Arason. Gudni Bjornsson.

hours, until the fish muscle is made tough to endure filleting, skinning and trimming without drip loss. The processing yield increase is in the range of 5During the salting as storage process; the fish is ready directly after filleting as it is lightly salted with the highest possible yield rate, density and quality.



## THE FINEST FISH For FISKMARKAÐURINN

Head chef Hrefna Rósa Sætran has a passion for local, fresh seafood ingredients.

Fiskmarkaðurinn combines fresh Icelandic ingredients with a modern twist, delighting the palates of foodies from around the world. Fiskmarkaðurinn stands out among a number of fantastic seafood restaurants in downtown Reykjavik. What makes Fiskmarkaðurinn special is the combination of ingredients the chef employs. For instance, the fresh, grilled monkfish comes with crispy bacon, cottage cheese, tomato yuzu pesto and crunchy enoki mushrooms. It's a vision, as is the salted cod with lime zest, with potato puree, apple and celery salad.

Hrefna Rósa Sætran, the head chef at Fiskmarkaðurinn, takes great care to source the finest Icelandic fish for her delicious, inventive











dishes. She buys the best local salmon, cod, langoustine, and monkfish that Iceland has to offer from its vast, clean waters. Hrefna has an obvious passion for the ingredients she chooses. "To this day, my favorite single ingredient is salmon," she said. "The ultimate thrill is to have a fresh whole salmon in front of me, cutting it up and preparing it for sushi and other dishes—even picking and counting all of it's 32 bones. It is just so beautiful and fascinating."

#### **Unique Vision**

The restaurant's deep-fried dried fish is a perfect example of her creative spirit. Harðfiskur (dried fish) has been an Icelandic favorite snack for centuries, providing wholesome nourishment and ample protein in every bite. But Hrefna simply dipped the fish in green tempura and deep-fried it, creating a tasty treat that combines a classic Icelandic ingredient with a new spin. Indeed, her dishes have been described as traditional Icelandic cuisine with a modern twist. "We cook local, but still I want the freedom to go



anywhere I want, using fresh ingredients from all over the world to turn the local core ingredients into a culinary rollercoaster," said Hrefna.

#### Household Name

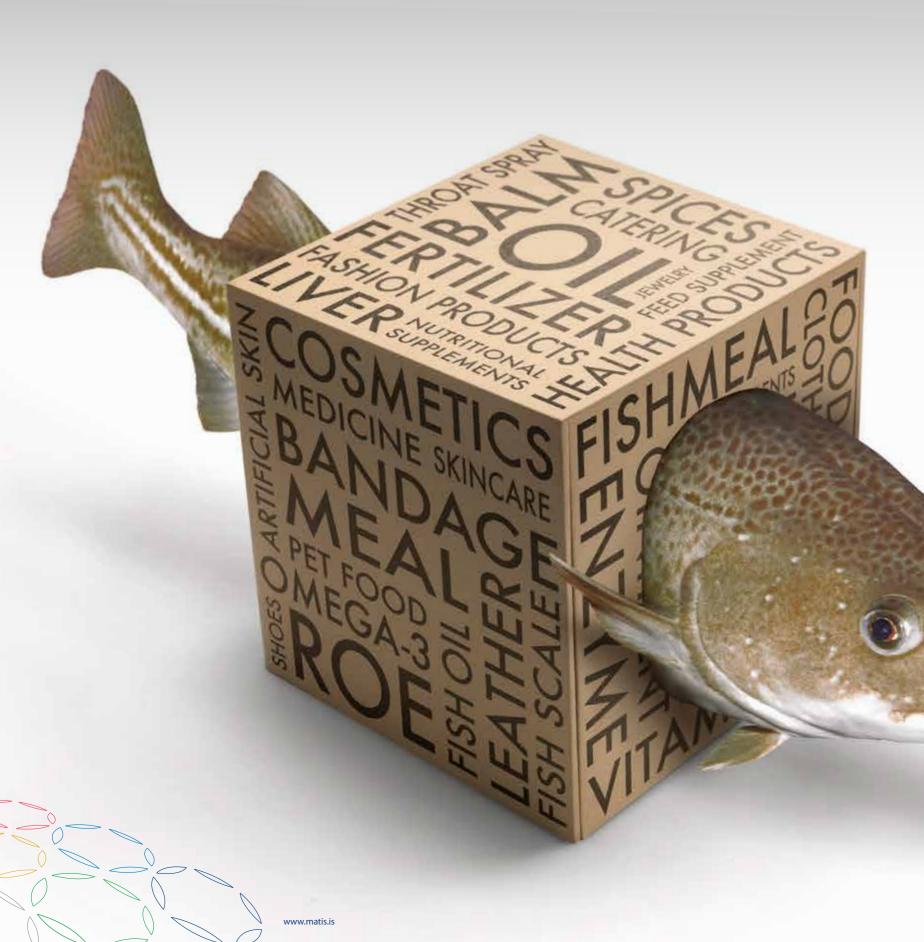
Hrefna is well known and respected throughout Iceland and has made her mark on Icelandic food culture with her restaurants, television appearances and recipe books. But, that success did not arrive overnight. Hrefna is an experienced, trained chef who completed her chef's internship at Apótek Restaurant in Reykjavik. She was a member of the first Junior Culinary Team of Iceland and became head chef of Maru restaurant while





she was still in training. After graduating, Hrefna began her cooking career at the Michelin-starred restaurant Léa Linster in Luxembourg. Hrefna eventually returned to Iceland and continued her career at Sjávarkjallarinn where she became head chef. Fiskmarkaðurinn was founded in 2007 and quickly became a favorite in the Reykjavik restaurant scene with Hrefna as head chef, and the restaurant remains both popular and highly acclaimed.





## Think into the box ...

Most innovation involves identifying new opportunities in what we already have. Finding use for what we used to throw away. To make connections others cannot see. Our role is to help innovators package and implement their ideas to benefit us all.

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