



**HEALTHY OCEANS.
HAPPY FISH.**



YEAR END REVIEW 2018-2019



MESSAGE FROM THE
EXECUTIVE DIRECTOR

**2018 WAS ANOTHER
WHIRLWIND YEAR –
MARKED BY CHANGE
– AS WE CONTINUED
TO PROMOTE THE
BENEFITS OF THE
SALMON FARMING
INDUSTRY IN
ATLANTIC CANADA
AND WORKED HARD
TO SUPPORT OUR
MEMBERS.**

We said goodbye to Larry Ingalls, our Chair and long-time member, and wished him well in his new ventures; We welcomed Jamie Gaskill of MOWI (formerly Marine Harvest) as our new Vice-Chair and Kasha Cox of MERCK to the Board as well as several new Associate Members.

Several long-standing programs finally took off, including a much-needed half million dollar upgrade to our Limekiln Bay Service Centre. The project will allow us to safely serve our 80+ users every year. Our goal of placing real-time environmental buoys in the area became a reality thanks to the Atlantic Fisheries Fund and the Province of New Brunswick as well as our academic and industry partners.

The industry continued to be a leader in innovation, with many examples - including an 80% reduction in chemical use as farmers incorporated more green technology - highlighted during our annual Science, Research and Technology Forum. Advancements in land-based technology, new alternative feeds and the amazing progress in fish health systems are just a few other areas worth noting.

We continue to be proud of our work in the community as well supporting such important causes like the Charlotte County Cancer Society, the local food bank and the SPCA. We take our social responsibility seriously and take every opportunity to participate in events such as NB Farm Day, Bay of Fundy Seafest, beach cleanups and of course wild salmon restoration projects such as Fundy Salmon Recovery.

ACFFA has worked hard this year to continue to be a strong voice on behalf of our industry and to take a leadership role in strategies that support responsible growth and global sustainability, advance fish health and welfare and encourage innovation and research. I would be remiss if I did not comment on the challenges this highly regulated industry continues to witness without a federal 'home'. Encouraged early on that we would see a federal government champion this industry as they do in Norway and other countries, we find ourselves once again federally homeless and hoping for recognition and leadership.

Looking ahead, we still have lots of work to do, but I continue to be proud to work with so many aquaculture professionals who are global leaders in the evolution of this sector and who are creating jobs in Atlantic Canada's coastal communities. I'm grateful for the support I receive from both my national and international colleagues as well as my team and our board members.

I'm looking forward to 2019!

Susan Farquharson
Executive Director
Atlantic Canada Fish Farmers Association

WHO WE ARE

The Atlantic Canada Fish Farmers Association (ACFFA) is an industry-funded association working on behalf of the salmon farming industry in Atlantic Canada. The ACFFA represents salmon producers in addition to a wide range of supporting companies and organizations.

Salmon farming creates over

**3,500
DIRECT JOBS**

in our region and generates over

**\$350
MILLION**

in our provincial economies.



Our Vision

Atlantic Canada's finfish aquaculture industry will continue to be an innovative, competitive economic sector that is globally recognized for sustainable finfish production.

Our Mission

To provide value to our members by continuing to be a strong, regional voice on behalf of the industry and by taking a leadership role in the development and implementation of strategies that maximize growth potential, advance fish health and welfare, encourage innovation, research and environmental stewardship while increasing socio-economic benefits within our communities.

Association Goals

BUILD

effective structures and relationships that support the sustainable growth of the Atlantic Canadian finfish aquaculture industry

MAINTAIN

our position as a world leader in fish health initiatives that support the production of safe, high-quality farmed finfish

SUPPORT

scientific research and technological development that is industry-driven and ensures the ongoing sustainability of an innovative Atlantic Canadian finfish aquaculture industry

INCREASE

the positive awareness of Atlantic Canada's finfish farming industry

MANAGE

the Association efficiently and effectively to ensure it remains a strong, representative organization that provides value to its members

A SUSTAINABLE SOURCE OF HEALTHY PROTEIN

Now more than ever, with the world's growing population, freshwater conservation issues and arable land constraints, salmon farming is making a vital contribution to global food needs. Atlantic Canadian fish farms on average produce 50 per cent of Canada's farmed salmon. Farmed salmon is the biggest agriculture-based export in Atlantic Canada.

In Atlantic
Canada over

300

MILLION MEALS
of farmed salmon
are grown
every year



FOOD FOR THE FUTURE

FARMING THE OCEAN IS CRUCIAL FOR SUPPLYING THE WORLD'S FOOD NEEDS AND FOR KEEPING THE POPULATION HEALTHY.

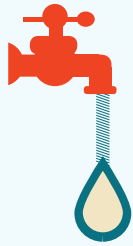


FROM **7 BILLION** TO OVER **9 BILLION** BY 2050



WORLD **FOOD SUPPLY**

NEEDS TO **DOUBLE** BY **2050**



BY 2025 **1.8 BILLION** PEOPLE WILL LIVE IN AREAS PLAGUED BY **WATER SCARCITY**

ARABLE LAND PER PERSON IS **SHRINKING**

WORLD FARMED FISH PRODUCTION HAS SURPASSED **BEEF**



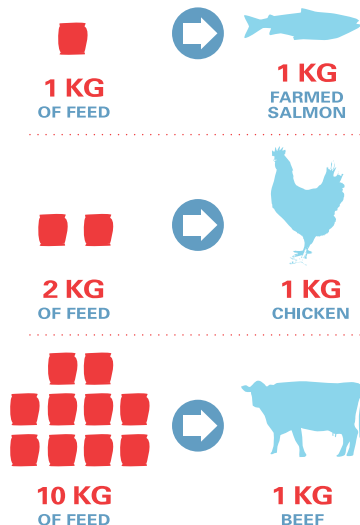
SALMON IS ONE OF THE MOST ENERGY EFFICIENT FARMED ANIMAL.

CARBON FOOTPRINT

Greenhouse Gas Emissions, kg,CO₂/kg edible product at wholesaler

Herring	0.52
Mackerel	0.54
Chicken	2.7
Salmon	2.9
Cod	2.9
Haddock	3.3
Pork	5.9
Beef	30.0

SALMON ARE FEED CONVERSION CHAMPIONS



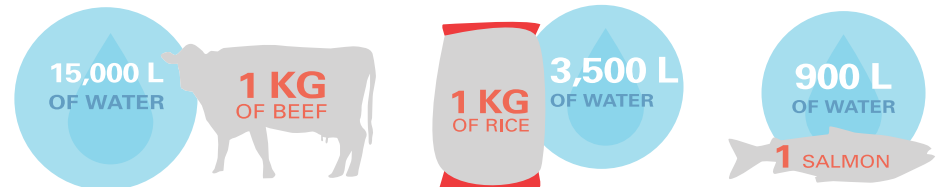
SUSTAINABLE SALMON

SALMON FARMERS ARE COMMITTED TO SUPPLYING SUSTAINABLE SEAFOOD TO CONSUMERS AND CONTINUING TO BE STEWARDS OF THE WORLD'S OCEANS AND AQUACULTURE ENVIRONMENTS.

Atlantic salmon farmers have developed a modern and responsible industry that meets international and national regulations and industry codes of practice. Key elements of modern salmon farming include area management, integrated fish health management, and environmental monitoring programs. Our salmon farming companies also comply with third party certification programs.

The salmon farming sector helps drive rural economic diversification by directly and indirectly creating jobs, supporting the creation and expansion of small businesses and stimulating ongoing, transferrable innovation.

LOW FRESH WATER USE



CHARITY CASINO GALA

We celebrated the accomplishments of our members and raised money for a community cause at our Charity Casino Gala at the Algonquin Resort in St. Andrews. As a result, we were happy to present \$2,000.00 to the Charlotte County Cancer Society. The Gala was held as part of our annual Research, Science and Technology Forum.



The Atlantic Canada Aquaculture Award

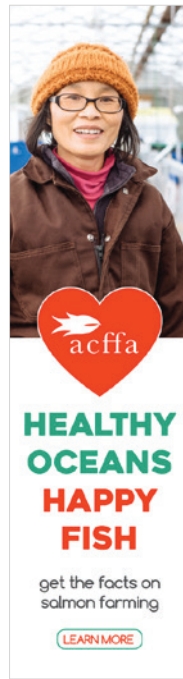
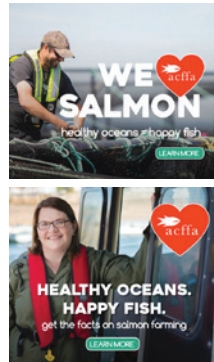
Alan Donkin of Moncton earned the 2018 Atlantic Canada Aquaculture Award in recognition of his long-time commitment to the success and growth of this region's salmon farming industry. Skretting International and Northeast Nutrition co-sponsored the 2018 award and presented it to Donkin at ACFFA's Charity Casino Gala. Originally from Truro, Donkin graduated from the Nova Scotia Agricultural College and McGill University (animal science). He started with Shur-Gain in 1978 and was part of the team tasked with developing salmon feed in 1985 when the industry was just getting started. Donkin worked for Shur-Grain for 30 years. He joined Cooke Aquaculture in 2008 as Nutrition Manager at Northeast Nutrition. Alan Donkin is one of the unsung heroes of our region's aquaculture industry and has helped drive significant innovations in fish nutrition since the industry began 40 years ago.



EDUCATION & OUTREACH

Healthy Oceans Happy Fish

ACFFA ran an eight-week Healthy Oceans Happy Fish social media and digital ad campaign this winter and spring to raise fact-based positive awareness supporting the salmon farming industry in Atlantic Canada. The campaign served over eight million ads to Atlantic Canadians and garnered over 24,000 clicks and engagements. The campaign linked to ACFFA's new [salmon farming fact sheets](#). ACFFA's annual regional consumer polling once again showed an 80 per cent approval rating for salmon farming in our region and reinforced the importance of continuing to educate the public on the facts about salmon farming.



Salmon Farm Tours

ACFFA once again participated in NB Open Farm Day. Science and Technology Coordinator Betty House, along with the terrific staff at Island Quest Marine, hosted a farm tour on September 16. Participants learned about salmon farming and enjoyed samples of smoked salmon. ACFFA donated the tour participant fees to the NB Heart and Stroke Foundation. We were pleased to see so many families with children attend.



On June 14, ACFFA assisted Cooke Aquaculture to host 70 young students from Princess Elizabeth School in Saint John. They were able to beachcomb and eat their lunches in front of a farm site on Deer Island while Betty and Chuck Brown from Cooke Aquaculture talked to them about the farm and how it works. Each student was sent home with their beach finds and an aquaculture-focused activity book.



International Year of the Salmon

In 2018, ACFFA began a project to mark 2019's Year of the [Salmon](#) by creating a children's book about salmon farming. The book will explain how salmon farms operate through an engaging narrative tale that will use both photography and illustration. We envision this as significant legacy project for salmon farming in Atlantic Canada and around the world. It will be aimed at Grade 2-3 level readers in English and French. It's scheduled to be published in the fall of 2019.

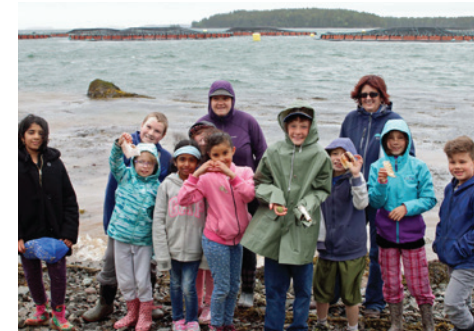
Community Support

The ACFFA supports a variety of community causes that recognize the benefits of eating healthy and farmed salmon being a part of that diet, including sponsorship of the Parkinson's Society of Canada's Annual Gala, raising funds for the Heart and Stroke Foundation and the Charlotte County Cancer Society. ACFFA members also donated several Christmas dinners with all the fixings to the St. George Food Bank.



World Oceans Day

ACFFA marked World Oceans Day on June 8, 2018 by joining in the celebrations at the Huntsman Marine Science Centre/ Fundy Discovery Aquarium. We hosted an information booth to educate children about salmon farming and the preservation of our oceans. We were pleased to be present to help the Huntsman mark the opening of their new park, outdoor classroom and saltwater supply system.





ASSOCIATION ACTIVITIES



ACFFA Golf Tourney

We hosted our annual ACFFA Industry Golf Tournament as part of Bay of Fundy Seafest. We had a great day and turnout for the tourney, which saw LCR Plastics team Braden Hatt, Aaron Craig, Roger Waycott, and Scott Matheson take top prize. Andrew Erving won the putting contest sponsored by Skretting. The event raised money for the Charlotte County SPCA. Operations Manager Tobi Taylor organized and hosted the tourney.



Atlantic Aquaculture Mission to Norway and Aqua Nor

Plans are in the works to lead a delegation to Norway and [Aqua Nor](#) August 16-23, 2019. Aqua Nor, which showcases the latest innovations in aquaculture technology, marks its 40th anniversary this year. ACFFA is managing a Canada/Norway night with live east coast music and organizing an Innovation Seminar.

Our Membership is Growing

The ACFFA welcomed three new members – Benchmark Animal Health, Pro-Oceanus Systems, and Valores. The ACFFA membership is open to any company, institution or individual engaged in growing finfish products commercially, producing feed, research or development activities, education, or providing goods or services to the finfish farming sector in Atlantic Canada. For more information on membership benefits and to apply go to our website – atlanticfishfarmers.com.



Limekiln Bay Service Centre

Upgrades to the Limekiln Bay Service Centre are expected to be complete this summer. We continue to see an increase in users at the service centre, and the upgrades are necessary to ensure the facility remains accessible to the more than 80 users.



Seafood Expo North America 2019

ACFFA worked with Prince Edward Island again this year to assist with the Atlantic team at Seafood Expo North America in Boston in March 2019. The Atlantic Pavilion hosted 32 exhibitors at the largest seafood show in North America where more than 22,150 people from 117 countries visited.



COMMUNITY PARTNERSHIPS



Fundy Salmon Recovery

2018 marked another historic year for this groundbreaking initiative that is making significant strides to help save the endangered inner Bay of Fundy wild salmon. Along with our partners, ACFFA and its members helped the Fort Folly Habitat Recovery and Fundy National Park teams return over 770 mature adult salmon to either the Upper Salmon River or the Pollett River. Over 70 salmon made their way back to the Upper Salmon River in 2018 – marking a 29-year high. Leading up to the release date, Cooke Aquaculture staff cared for the fish at the World's First Wild Salmon Marine Conservation Farm in Grand Manan. (fundysalmonrecovery.com).

Blended NBCC Aquaculture Operations Program

ACFFA continues to work with the New Brunswick Community College to enhance and promote its new [aquaculture operations program](#). Developed with input from industry, this course teaches students technical knowledge and skills such as salmonid biology and husbandry, the aquaculture production cycle, feeding and nutrition regimes, regulations and policy as well as important soft skills such as leadership, teamwork and communication skills. The course gives working professionals the skills they need to advance their careers and serves as a foundation to help those new to aquaculture succeed in this sector. Students are able to apply the knowledge acquired in the program to the real-world, with a combination of in-class learning and on-site placement with a partnering industry (if not already employed). We are reviewing the curriculum to best serve the industry and students and to make it a credit course. The second delivery of the course started in January 2019, and we are considering the potential of a September 2019 class as well.

RESEARCH

Aquaculture is a science-based industry. Our members collaborate with academia and governments and invest significant money and resources to ensure we are continually advancing our tools and methods to grow healthy fish and continue to be environmental stewards.

Each year the ACFFA meets with its members to develop an R&D priority list. Some of those for 2018:

- New benthic indicators such as eDNA for use in environmental management programs, provincially and federally
- Sea lice management
- Fish welfare
- Verification of marine circulation models

Annual Research, Science and Technology Forum

The ACFFA hosted its annual fall conference that brought together 170 aquaculture professionals, researchers, regulators and other stakeholders to learn, connect and discuss future collaborative research priorities. The conference, which was held in October at the Huntsman Fundy Discovery Centre in St. Andrews, included presentations on a wide range of topics, including off-shore farming, engaging youth in salmon farming, Fundy Salmon Recovery, fish health, green alternative technology and the role of eDNA in aquaculture.

Migration of Atlantic salmon post-smolts

In 2018, the Department of Fisheries and Oceans started a two-year project in Passamaquoddy Bay (New Brunswick, Canada) to provide information on Atlantic salmon post-smolts - their migration routes out of the Passamaquoddy Bay, the speed at which they move out of the bay, their survival rates in the estuary and in the ocean, and whether there is any interaction with salmon aquaculture. In May 2019 DFO released the first group of 80 salmon smolts of wild origin implanted with acoustic tags and released them above and below the dam in the Magaguadavic Basin. The second group were released in mid-June. Their migration and survival will be monitored by over 130 receivers placed in the Magaguadavic Basin and estuary, outside the mouth of the estuary, at all the exit points of Passamaquoddy Bay including the Maine side, and at active and inactive salmon aquaculture sites. Results will be discussed at the ACFFA forum.



A Real-Time Monitoring System - Supporting Sustainable Aquaculture Production in Southwest New Brunswick

Teams from DASCO Equipment and EOM Offshore have been contracted to deliver, assemble and deploy our first real-time data monitoring buoy in the Bay of Fundy with the help of Cooke Aquaculture. The data collected from the buoy will support decision-making for the aquaculture industry in association with the Aquaculture Bay Management Areas but will be available to all marine users. The real-time data will be processed at Dalhousie University and made available through the Northeastern Regional Association of Coastal Ocean Observing Systems (NERACOOS). Led by ACFFA, this project was made possible with funding from the Atlantic Fisheries Fund. Plans are underway for a second buoy next year.

ADVOCACY



The ACFFA continued its active advocacy role on behalf of members, meeting regularly with regional MLAs, MPs, regulators and other stakeholders to advocate on our priorities of sustainable growth, fish health, business risk management, marine vessel registrations and access to Small Craft Harbour infrastructure.

A FEW EXAMPLES OF OUR ACTIVITIES

Canadian Marine Advisory Committee – ACFFA continued to attend annual Canadian Marine Advisory Committee meetings and to meet with Transport Canada staff regarding the ongoing challenges aquaculture is facing operating with regulations that were not developed to manage the innovative vessels used to manage aquaculture marine farms. A request to establish an Aquaculture Working Group that would provide the forum, similar to fisheries and recreational, for discussions and solutions continues.

Small Craft Harbour Infrastructure – The lack of recognized access to Small Craft Harbour wharves peaked in early 2019 with the notice from the Grand Manan Harbour Authority that aquaculture vessels could not move into North Head in 2019. As a result of several meetings with the Department of Fisheries and Oceans Minister Jonathan Wilkinson as well as his staff, a steering committee was formed to address the situation. This committee acquired funds that has updated the 2014 report on Grand Manan wharves and is now leading the development of a business plan to see a new wharf built.

Marine Protected Areas (MPA) – As part of the Bay of Fundy Progressive Protection Council, ACFFA and other seafood producer/harvester organizations were successful in acquiring funds from the Department of Fisheries and Oceans to lead a process in the Bay of Fundy developing strategic alternatives to the MPA process while still meeting the UN's Sustainable Development Goals that Canada committed to in 2017. Projects such as the Fundy Salmon Recovery are listed as examples of these alternatives that must operate without fixed boundaries to be effective.

THE VOICE OF OUR MEMBERS

ACFFA represents its members on the following committees:

Aquaculture Association of Canada

Aquaculture Collaborative Research Development Program

Atlantic Canada Seafood Sector Export Team, Co-chair

Atlantic Salmon Advisory Committee

Canadian Aquaculture Industry Alliance Board of Directors

Canadian Aquaculture Industry Alliance

Industry Government Working Group

Canadian Aquaculture Industry Alliance Technical Committee

Fundy Salmon Recovery Team

Huntsman Research Committee

International Salmon Farmers Association

Marine Debris Strategy Action Committee

Musquash Advisory Committee

NB Aquaculture Containment Liaison Committee

NB Industry Government Working Group

NB and NS Aquaculture Environmental Coordination Committee

North Atlantic Salmon Conservation Organization (NASCO) – Canadian Delegation

Saint John River Management Advisory Committee



LEADERSHIP AND STAFF

2018-19 ACFFA Board of Directors

Tom Taylor (Chair) Cooke Aquaculture Inc.

Jamie Gaskill (Vice Chair) Mowi

Bob Sweeney (Secretary/Treasurer) Sweeney International Marine Corp.

Bev Bacon RDI Strategies

Morton Benson Benson Aquaculture

Peter Bourque Mitchell McConnell Insurance

Kasha Cox Merck Animal Health

Ben Forward Research and Productivity Council

Jonathan Gagne Enterprise Shippagan & International Seafood and Bait

Allison MacKinnon Elanco Canada

David Seeley Skretting North America

Matt Miller Northeast Nutrition Inc.

Staff

Susan Farquharson Executive Director

Tobi Taylor Operations Manager

Betty House Science and Technology Coordinator

Kathy Kaufield Communications Director

Jim Hanley Wharf Manager

Our Membership

Salmon Producer Members

Benson Aquaculture
Cooke Aquaculture Ltd.
Mowi

Feed Company Members

Northeast Nutrition
Skretting

Associate Members

Aqua Pharma Inc.

Atlantic Veterinary College

Benchmark Animal Health

Big Falls Fish Growers Ltd.

Dartek

Dover Fish Hatchery

Elanco

Enterprise Shippagan & International Seafood and Bait

Cargill

Future Nets and Supplies

Gas Infusion Systems Inc.

Global KnoVac Inc.

Huntsman Marine Science Center

Innovasea

Marsh Canada Ltd.

Merck Animal Health (Intervet Canada Corp.)

Mitchell McConnell Insurance Ltd.

Optimar

PatoGen AS

Pharmaq AS

Phibro Animal Health Corporation

Pro-Oceanus Systems Inc.

RDI Strategies Ltd.

Research and Productivity Council (RPC)

Sweeney International Marine Corp.

Center for Aquaculture Technologies Canada

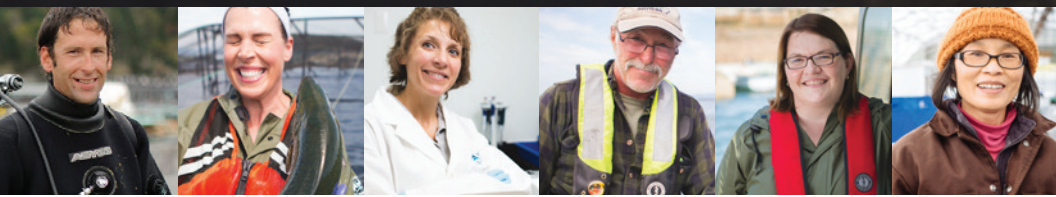
Valores



WE SALMON

healthy oceans = happy fish

atlanticfishfarmers.com



226 Limekiln Road | Letang, NB | E5C 2A8
Tel: 506-755-3526 | Fax: 506-755-6237

