

MARCH 2024

MANITOBA AQUACULTURE MARKET REPORT

Arctic Char



Close image



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OBJECTIVES AND METHODOLOGY

Objectives

The overall objectives of the Manitoba aquaculture market research are as follows:

- Conduct an analysis of the current state of the Manitoba Aquaculture sector.
- Investigate sales of Manitoba-farmed fish and identify the preferences of fish buyers in the market and future trends.
- Evaluate the potential for Manitoba to increase its aquaculture output highlighting the opportunities and challenges to do so.

At the project onset, the decision was made to focus the primary research on the Arctic char market. Aquaculture in Manitoba has been a minor producer of rainbow trout; however, Arctic char has represented as much as 25% of the Canadian Arctic char production in the past, and there are plans to capitalize on this position and grow production significantly.

Methodology

The methodology consisted of a secondary data search and primary interviews with key industry stakeholders.

Sources consulted for secondary data and market statistics included the following:

- Government of Manitoba
- Statistics Canada
- Department of Fisheries and Oceans
- NOAA Fisheries
- Seafood Watch
- FAO – Food and Agriculture Organization
- OECD Statistics

The primary research program focused on virtual or telephone stakeholder discussions.

- In total, 14 individuals from 10 organizations participated in this research. Stakeholders included producers, processors, distributors, and international Arctic char operators. A list of stakeholder consultations is included in the appendix of this report.
- A discussion guide was used to lead every discussion. The average length of completion was around 40 minutes.

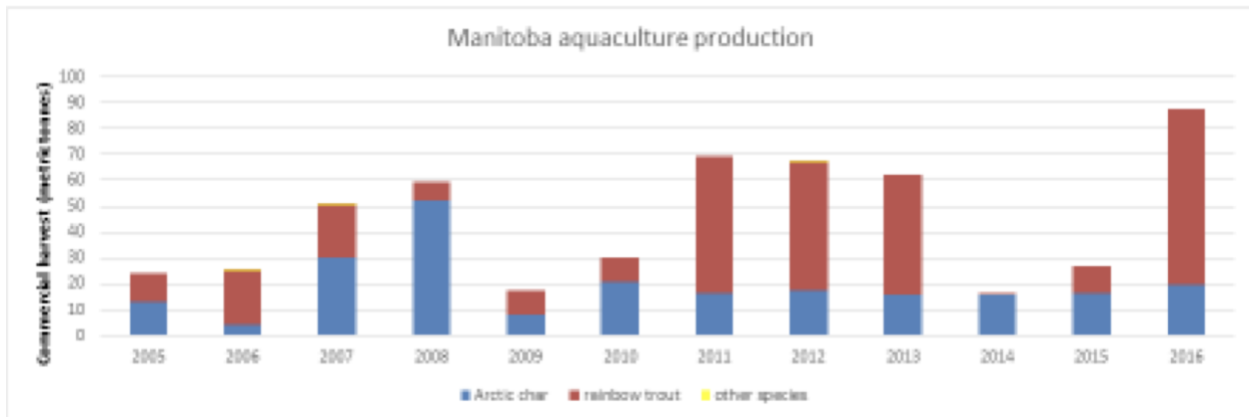
SECONDARY DATA AND MARKET STATISTICS

Arctic char (*Salvelinus alpinus*) is a cold-water fish species that grows well at the northerly latitudes in Canada as well as in other Nordic countries such as Iceland, Sweden, and Norway. It has very delicate brightly pigmented flesh with a mild flavor. It has long been a staple of northern Indigenous communities and has been a recent candidate species for aquaculture production with a significant increase in worldwide production over the last 25 years.

One significant area of Arctic char production is Manitoba, Canada.

1. Manitoba Aquaculture Market

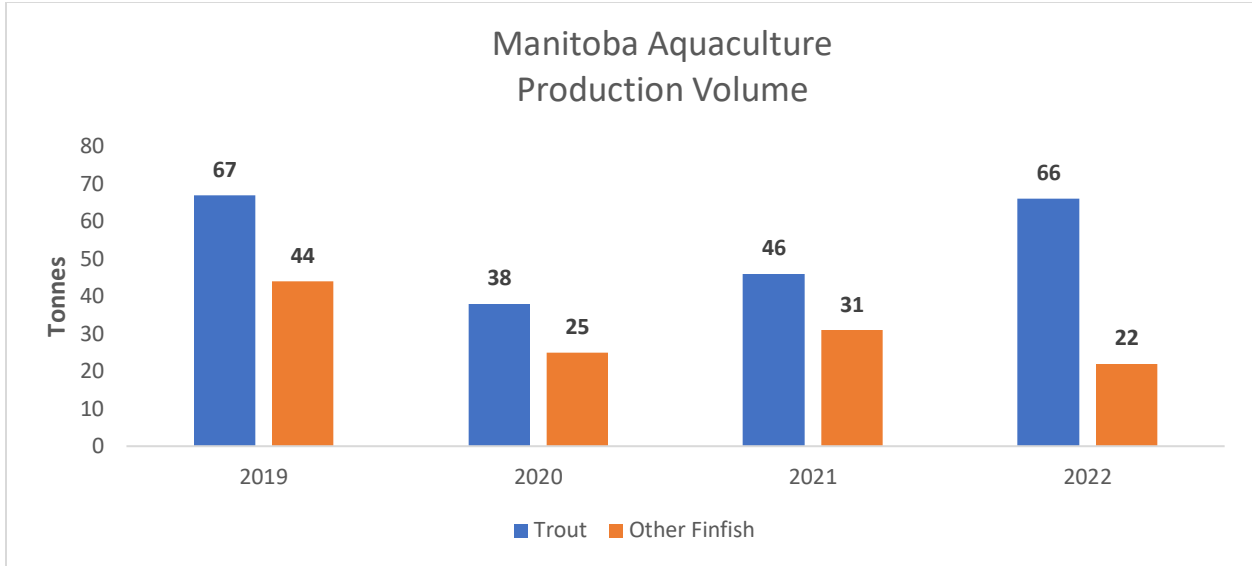
Manitoba has a mix of aquaculture production, rainbow trout, and Arctic char going back 25 years. Although production is relatively small in Canada, Arctic char has always been a significant species in Manitoba. In 2005, aquaculture production split evenly between rainbow trout and Arctic char and it is now approximately 25% of total aquaculture production.



Source: Sustainable Aquaculture Development: The Manitoba Context. Spawning Aquaculture 2.0 Jeff Eastman P.Ag Industry Development Specialist Aquaculture | Manitoba Agriculture

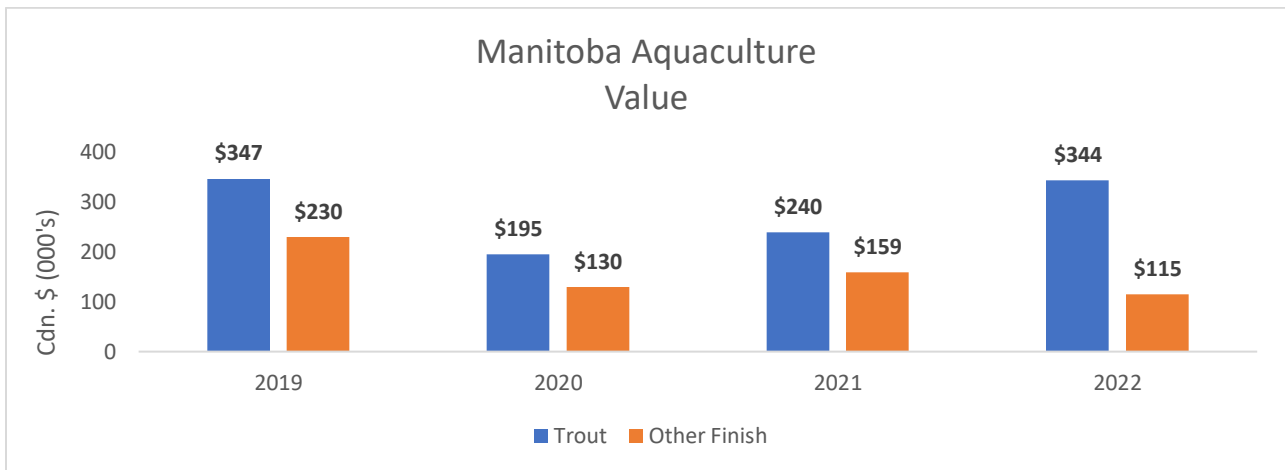
In 2022, the total volume of aquaculture in Manitoba was estimated at 88 MT and has been relatively stable over the four-year period from 2018 to 2022, with production ranging from 63 MT to 111 MT. Statistics Canada did not provide Manitoba-specific aquaculture data for prior years. Other finfish includes all ‘other’ species, including Arctic char, that are not specifically salmon, trout, or steelhead.

Arctic char has represented as much as 80% of Manitoba production recently; however, one of the major producers converted back to rainbow trout/steelhead trout in 2023. There are significant growth plans for Arctic char production in Manitoba; thus, any reduction in the percentage of Arctic char as a portion of overall aquaculture production will be short-lived.



Source: Source: Statistics Canada Table 32 -10-0107-01 Aquaculture, production and value

With respect to value, in 2022 the sector in Manitoba accounted for close to \$500,000 according to Statistics Canada data. In the four-year period, the values ranged from \$325,000 to \$577,000.



Source: Statistics Canada Table 32 -10-0107-01 Aquaculture, production and value

2. Global Arctic Char Market

The Arctic char market is a very small segment of the total salmonid market. Worldwide production of Arctic char is less than 10,000 tonnes, with salmon approaching 3 million tonnes and rainbow trout/steelhead trout at over 1 million tonnes.

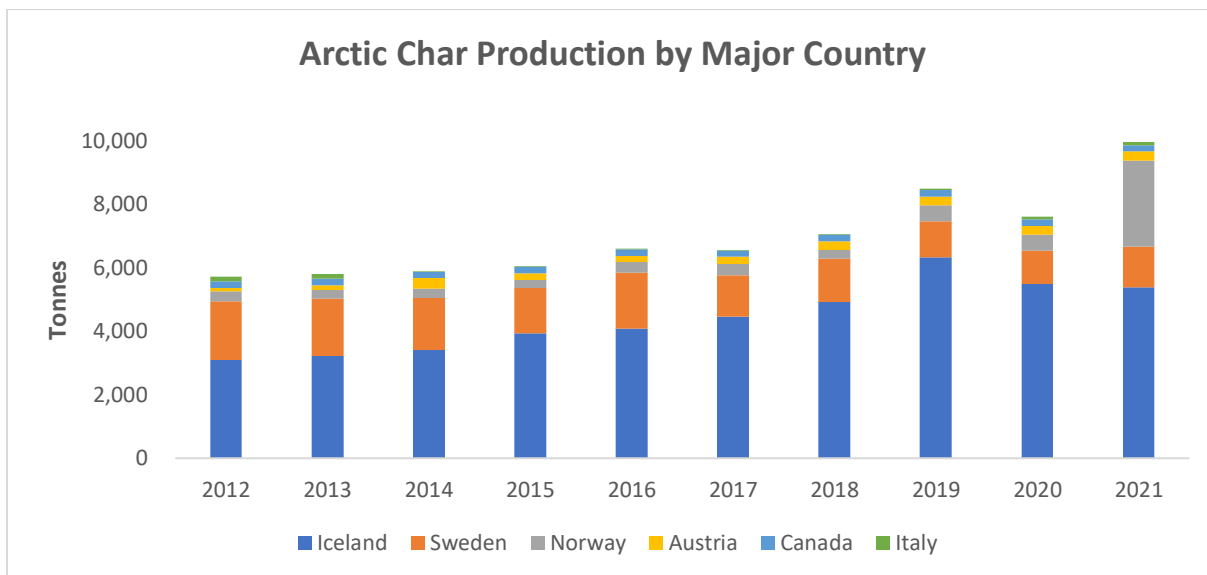
It is a very delicate fish and has long been a major part of the diet of northern Indigenous people in both North America and Europe (including Eastern Europe). As a wild-caught species,

it is frozen and shipped to markets generally by air freight, making it one of the more expensive salmonids.

Arctic char is sold at the high end of the Atlantic salmon pricing and generally into high-end food service and retail markets. In recent years, it has become more present in the Northeast United States and Northern European markets. However, per capita consumption is very low, even in the areas where it is popular.

2.1 Global Production

Global Arctic char production has risen from just under 6,000 tonnes in 2012 to over 10,000 tonnes in 2021. Growth in each country is variable, with the only significant steady increase coming from Iceland.



Source: OECD.stat – Aquaculture Production 2012 – 2021
https://stats.oecd.org/Index.aspx?DataSetCode=FISH_AQUA

In 2020, Iceland accounted for the majority of worldwide production, (72%), of total production, followed by Sweden (14%), Norway (7%), Austria (3%), and Canada (2%). Production from other countries was negligible.

3. Icelandic Arctic Char Production

Iceland has secured itself as the leading producer of Arctic char. Samherji fiskeldi produces more than two-thirds of the country’s total at over 3,000 tonnes. Samherji has two farms that focus on Arctic char production. Matorka is the country’s second-largest Arctic char producer at over 1,000 tonnes. Both producers have an abundance of cool water as well as access to geothermal water to help provide the ideal temperature and environment for the production of Arctic char.

All three of these farms are certified by the Aquaculture Stewardship Council (ASC), and their combined production makes up ≈ 80% of Iceland’s total Arctic char production. Both Samherji and Matorka are fully integrated operations, so these companies control all aspects of their production from hatchery through processing.

There are 2 other farms harvesting over 100 tonnes per year, with a number of much smaller producers situated along the southern coast of Iceland. These producers focus on small domestic and foreign “niche” markets.

4. Canadian Arctic Char Production

The volume of Canadian production is said to be as high as 600 tonnes; however, DFO has been estimating annual production at approximately 200 tonnes for over 10 years. Production is conducted in 1 territory, Yukon, and five provinces, British Columbia, Manitoba, Ontario, Quebec, and New Brunswick. There has been production in Newfoundland in the past, but that has been converted to trout and salmon.

Egg production is now primarily conducted in the Yukon; however, Manitoba, Ontario, and New Brunswick have breeding programs. The egg production from these programs is quite small and is used locally. The Yukon producer is CFIA-certified to export eggs across Canada and is also a major international exporter.

There are Arctic char hatcheries in all of the regions mentioned. It is quite reasonable to assume a production capacity of at least 600 tonnes; however, many of these facilities are not fully utilized and have also experienced significant production challenges. The estimates in the table below are in line with the DFO estimates.

Major Canadian Arctic Char Production by Province		
Location	Production Type	Estimated Annual Production (Tonnes)
Yukon	Eggs, Fingerlings, Market	120
British Columbia	Fingerlings, Market	10
Manitoba	Eggs, Fingerling, Market	20
Ontario	Eggs, Fingerlings, Market	5
Quebec	Eggs, Fingerlings, Market	40
New Brunswick	Fingerlings, Market	5
Total		200

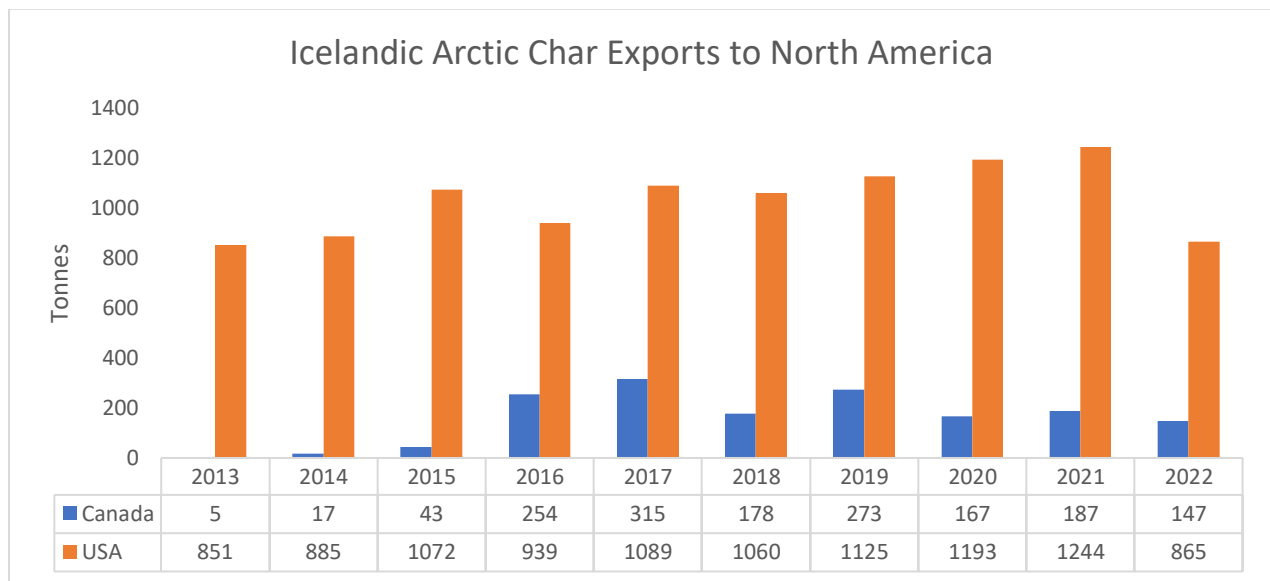
Estimate by Four Links Marketing Ltd.

Arctic char has long been viewed as an ideal aquaculture species in Canada because of its preference for cool water, ability to be raised in high densities, superior taste, texture, and rarity. However, production challenges rather than market challenges have continued to be the leading restriction to growth.

The majority of Canadian production is in the Yukon at over 60%. Manitoba is number 3 in Canada behind Quebec, with approximately 10% of Canadian production.

5. North American Arctic Char Imports from Iceland

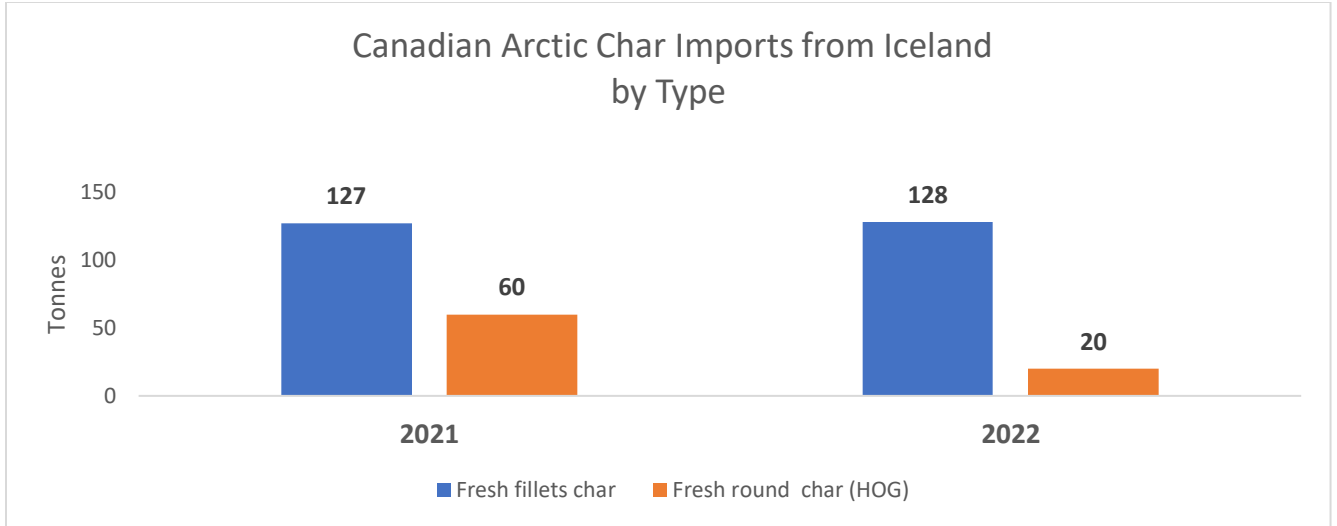
Arctic char imports from Iceland have steadily grown since 2013 to approaching 200 tonnes per year, similar to Canadian production. All Arctic char is flown into Canada and the United States from Iceland. The biggest distribution point is Boston, Massachusetts; however, the product is also flown into New York and now several points in Canada.



Source: Statistics Iceland - Export of aquaculture products by country – Custom Data

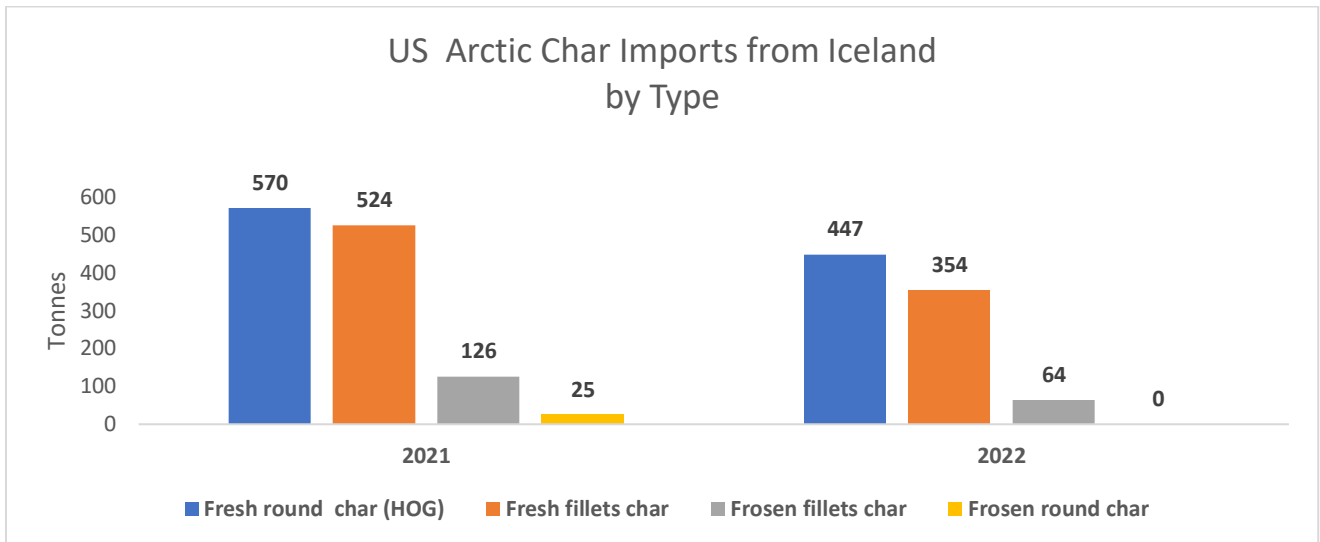
Air freight makes it more attractive from both quality management and cost management to bring in fillets although many chefs in top-end restaurants still prefer to cut their own fillets and portions in their facilities, especially in the United States.

Fresh fillets dominate the type of Arctic char imported compared to fresh round char (HOG) in Canada. However, in the United States, the split between fillets and HOG appears to be more evenly distributed.



Source: Statistics Iceland - Export of aquaculture products by country – Custom Data

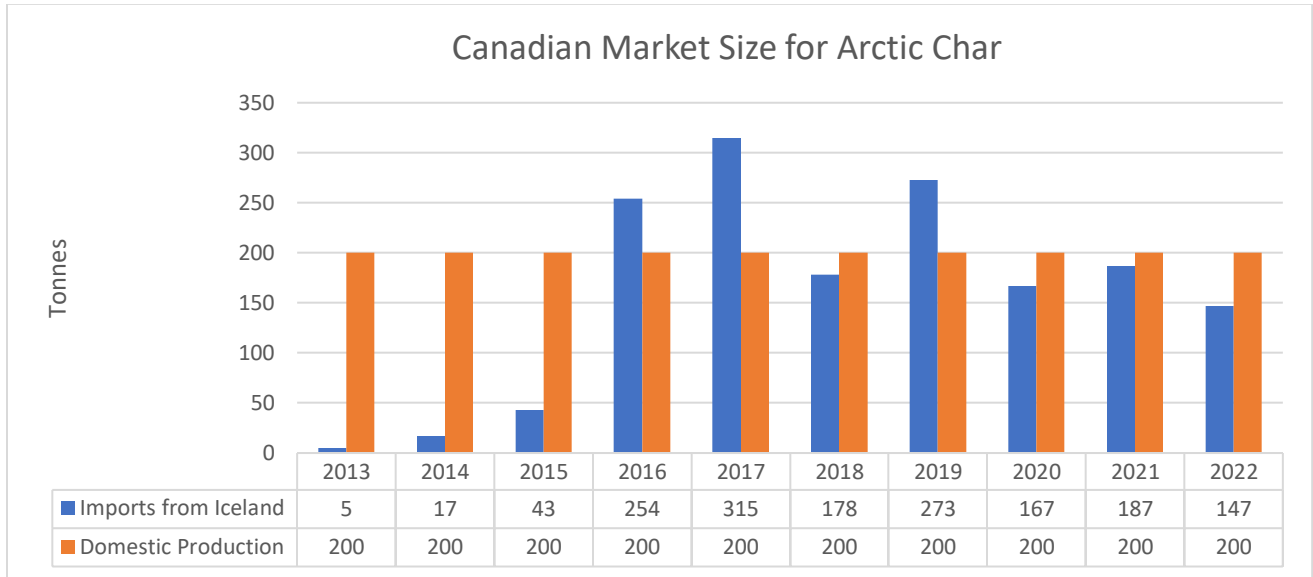
The United States’ Arctic char imports from Iceland are almost an even mix of fresh head-on gutted (HOG) Arctic char and fresh Arctic char fillets. In addition to the earlier comments, Atlantic salmon from Europe to the US is imported primarily as HOG, and there is a large secondary processing industry throughout the US to process Arctic char into fillets.



Source: Statistics Iceland - Export of aquaculture products by country – Custom Data

6. Domestic Consumption of Arctic Char in Canada

The estimated market (consumption) in Canada for Arctic char was 347 tonnes in 2022. This consists of domestic production of 200 tonnes and imports of 147 tonnes. Almost all Arctic char imports to Canada originate from Iceland. The market size has been relatively stable between 2020 to 2022, ranging from 347 to 367 tonnes. During these three years, imports accounted for an estimated 40% to 48% of the total market size.



Source: Statistics Iceland - Export of aquaculture products by country – Custom Data
 OECD.stat – Aquaculture Production

STAKEHOLDER INTERVIEW FINDINGS

This section of the report presents feedback from the stakeholder interviews conducted in February and March 2024.

1. General Trends in Seafood

The key trends identified by stakeholders in this research are as follows:

- Trend towards more fillets and less HOG in **food services**. The move from HOG to fillets in restaurants makes it easier for chefs, as less work is required for fish preparation, which also helps restaurants keep their costs down.
- More **ready-to-cook value-added seafood selection** spearheaded by younger generations - millennials, Gen X, and Gen Z. Stakeholders commented this is not necessarily the same as ready-to-eat.
- More **individual portion sizes**.
- More **home food delivery services**.
- **Greater traceability** from farm to fork.

Stakeholder comments include:

“We actually launched what we call a six-ounce center cut. And so, it's a perfect square loin cut, and you get a nice clean rectangular cut that's consistent, so that it will cook the same. ... some of the high-end chefs did not have the desire to buy a hog fish and break it down themselves as COVID kind of quieted down, restaurants opened back up and people got used to going out again, we did see a resurgence in fresh volume. But the hog product never came back to us, and it really became a fillet business - nobody wanted the full hog product like they used to.”

“There's such innovation coming out in packaging and capabilities to take something that can go straight into the oven.... to be ready to be thrown in the oven and so that I think that demand is going to continue to grow. In the next five years, I think you're going to see a much higher increased demand for that kind of product coming out of our sector.”

“We can put a QR code on the package that the consumer can scan and read. But it's important that they can follow that all the way back, including when you talk about organic certification to the feed input supplies.”

2. Arctic Char Characteristics

Arctic char was consistently identified by stakeholders as a high-value/premium niche product. It was also described as a special occasion fish, mostly consumed in white tablecloth restaurants. *“People love it! It has a very loyal following.”*

The following characteristics or words were often used to describe Arctic char:

- **Bright orange** in colour. *“So bright that it actually looks like a **blood orange**.”*
- A **unique colour** that is different from either trout or salmon colours. Some described it as ‘vibrant.’ *“Pigmented feed produces a very distinctive orangey color.”* There was also a comment that Canadian Arctic char was “yellowy” rather than bright pink. Also, if you see “dark red” Arctic char it is “wild Baffin Island Arctic char.”
- **Firm** – The flesh cuts well with no gaping and is firm to the touch.
- **Delicate** – *“It’s long and lean and delicate compared to salmon or trout.”*
- **Milder tasting** than other salmonids - *“It doesn’t taste as fishy as a lot of other fish do.”* *“We have some customers that don’t like fish, but their doctor recommends that they eat it, so char is the perfect fish because it has a mild flavour.”*
- **Not** typically part of the weekly household menu rotation.
- **Shelf life** – Like other farmed salmonids the “shelf life” is approximately 14 days. Several stakeholders suggested a difference in shelf life between tank-reared Arctic and net pen-reared Arctic char of 4 less days, at 10 days. There was also a comment about “slime” in tank-reared Arctic char that affects shelf life.

“So Arctic char is a salmonid. It’s a cousin to Atlantic salmon. The reason that it’s a premium is because it comes with a mild flavor it provides an exceptional canvas for either a professional chef or a home cook to build in their flair. So, it gives you the same texture and the same enjoyment or same plate profile as other go-to salmonids, but it is not as limiting in terms of how it can be composed into a meal and appetizer or any other kind of dream that you have to put on your plate. And so, it’s that mild flavor that will make even the stingiest, trickiest fish eater fall in love with Arctic char. “

“People who try Arctic char love it and it seems to have a loyal consumer base. It is not a fish that will likely make it in most household weekly meal rotation but rather is positioned as part of a premium special occasion meal.”

“I think people that like salmon that try char will be like, wow, I had no idea I prefer the taste of char over salmon. I think most people would too - it's got a milder, kind of sweeter flavor. “

There was some discussion on **colouring** and the difference between Arctic char products that originate in **Iceland** vs. what is produced in **Canada**. The Icelandic char is described as having consistency in regard to taste and colour – there is little variation in the quality of Icelandic char being shipped and consumed in Canada. In comparison, the Canadian char does not always possess the bright orange colour that consumers have come to associate with Arctic char. For some Canadian producers, the colour of their Arctic char can be more yellowy or pale. As one stakeholder explained - *“There is no difference in actual taste. It’s about the presentation and perception/expectation.”*

“We tweaked the (feed) formulation a little bit and the fillets seem to hold the pigment better now. But it's still the yellowy colour.... I have no idea how the Iceland stuff looks the way it does...it must be genetics.”

“The stuff from Iceland is nice. I must say it's very appealing. Good color (very appealing orange colour), very fresh, good shelf life. It's a good product. “

3. Price Points

The chart below identifies the location, retail outlet, and prices for Arctic char gathered between October 2023 and March 2024.

Retail Prices for Select Regions and Outlets			
Canada	Retail Outlet	Product	Price \$/kg
Winnipeg	Freshwater Fish	Baffin Island Arctic Char Fillets	\$57.32-59.52
Woodbridge	Seacore	Arctic Char Fillet Iceland	\$33.04
Toronto	Avenue Road Seafood	Arctic Char Fillet Iceland	\$29.99 (lb)
Toronto	Eataly	Arctic Char Fillet Iceland	\$50.38
SW Ontario	Direct to Home	Frozen Arctic char Fillet CDN	\$29.70-40.78
Winnipeg	Safeway	Arctic char Fillets	\$44.00
Hamilton	Fortino’s	Arctic char Fillet - Norway	\$37.46
Kitchener	Caudles Catch	Arctic char Fillets	\$37.45-44.07
United States			Per lb./USD
Manhattan, NY	Whole Foods	Arctic Char Fillets Iceland	\$17.99
Rockland, MA	Whole Foods	Arctic Char Fillets Iceland	\$12.99
Boston, MA	Aquanor Stand SENA	Arctic Char Fillets Iceland	\$14.99 - \$16.99

The wholesale farm price of Arctic char is higher than both trout and salmon with the highest being Baffin Island wild Arctic char at over \$57.00 per kg.

The following table highlights the farm gate prices of Arctic char. Head on Guttled is close to double the value of Rainbow Trout, with fillet prices approximately 50% higher than Rainbow trout.

Farm Gate Prices		
Arctic char Product Form	Region	Price Range CDN per pound
Fresh Fillets (10 ounce +)	Western Canada	\$13.70
Frozen Portions (4 ounce)	Western Canada	\$11.70-12.00
Head on Guttled (HOG)	Western Canada	\$8.70
Fresh Fillets (10 ounce +)	Prairies	\$7.00-10.00



One stakeholder expressed their surprise that Iceland is able to deliver fresh Arctic char in Canada, as far west as Calgary and Vancouver, and still be priced competitively.

“I’m always surprised that Iceland can bring fresh product to Edmonton, Calgary, and Vancouver. It shocks me that they can afford the logistics of the air freight from Iceland to Vancouver and still be competitive in the marketplace.”

4.1 Fillets vs. HOG

Fillets dominate the Arctic char market. Fillet sizes typically range from 10 ounces to 20 ounces. All fillets are skin-on pin-bone out. 40-pound master cartons are the most common unit size for transporting fillets.

“So, our standard offering is a 10-to-20-ounce fillet and that's anywhere from a 1.3 to 2.0 kg. fish - it almost breaks down perfectly where a 1.6-kilogram fish makes a 16-ounce fillet.”

“If selling direct to end-use customer at a farmer's market, they don't really care as much about the size. As long as it's nice and orange, the local wholesalers don't seem to care as much about the size of the fillets.”

For **HOG**, 3 lb. to 3.5 lb Arctic char is identified as the ideal size. Stakeholders identified 1-pound (450 gram) fillets, 1.2 pound fillets, 12-to-14-ounce fillets or 14–16-ounce fillets as being the ideal size. It was indicated that smaller fillets from 2 pounds are downgraded and sold as frozen fillets.

One stakeholder indicated that approximately 60% of sales are approximately 1 lb fillets, 35% portions, and 5% head-on gutted. Another interviewee said that 99% of sales are fillets.

“For economic efficiencies, anything over 3 lbs is good for Arctic char. If we had to pick the sweet spot for Arctic char, I'd pick 3.5 lbs.- a lot of feedback from the chefs and what they can portion out of those two filets. Chefs can probably get three filets out of it.”

4.2 Fresh vs. Frozen

During the period of Covid-19, there was a significant increase of frozen for at-home preparation. However, fresh fillets are the largest segment of sales in Canada, while frozen is the second largest, and HOG is a very distant third. Recent sales indicate that fresh is outselling frozen by at least 3 to 1.

In Canada, all frozen Arctic char is sold as fillets.

“As technology is getting better and changing and, and you know, gone are the days where you need 100 people standing on the processing line machines or machines are doing a really good job these days.”

5. Distribution Channels

The majority of Arctic char appears to be destined for higher end ‘white tablecloth’ restaurants in Vancouver, Toronto, and Montreal. Retail sales are mostly in smaller specialty ‘high-end boutique’ fish and seafood stores.

Icelandic Arctic char is brought in by distributors with Seacore and Sea Merchants both mentioned by name.

Shipments tend to be once a week closer to the weekend when restaurants tend to be the busiest.

One stakeholder spoke of a recent push to sell more locally, so they have been selling at every farmer’s market possible in the surrounding area.

Reinforcing its niche positioning, most stakeholders do not perceive Arctic char as a mainstream species. *“We don’t have enough supply to launch in any of the major retailers and I’ve never really had any interest.”*

The key to maintaining the premium niche position is freshness by delivering product to the market within 2 – 3 days of harvest.

6. Marketing Efforts

Several stakeholders spoke about their marketing efforts, including one person who spoke of starting a **Facebook** and **Instagram** page along with signs and posters in the local community.

“So, in the last year, we’ve learned a lot that if you actually put an effort in, you can actually sell quite a bit of it locally to the local customers for a bit of a premium price, because you don’t have to deal with the middleman.”

Recipe cards – *“We gave them a recipe card and made sure they know how to make this fish and make sure they know how to make it taste good. Because the problem with char is it doesn’t have a lot of oils and fats. if you leave it in your oven, or on your barbecue for too long, it gets too dry.”*

7. Certification

There does not appear to be one dominant certification body. The groups include BAP (Best Aquaculture Practices) and Monterey Bay Ocean Wise. For some stakeholders, certification is an important element because it helps represent premium quality product. It is important to note that Iceland is promoting ASC Certification of Arctic char. Certification schemes under review and consideration are as follows:

Processing

- SFCR/PCP including HACCP program
- CFIA compartmentalization (ova export program)
- FDA registration (export program)
- Organic (feed and input tracing)

Sales and Marketing Programs, which will potentially impact operations:

- Kosher
- MB Seafood Watch
- Ocean Wise
- BAP

Food Safety, Food Quality, and Sustainability Certification programs:

- BRC
- SQF
- GFSI
- Global Aquaculture Alliance Seafood Processing Standard
- ASC
- MSC
- PFSA Testing and Certification

8. Most important customer considerations

Stakeholders were asked what the top considerations are for their customers in purchasing Arctic char. The following key criteria dominate the factors:

High-quality Arctic char - Product that is consistent in its colour, taste, and freshness.

Consistent supply – Also described as consistent availability/reliability in getting to customers.

“The major distributors all say I’d love to buy Arctic char, I just can’t get it. It’s not consistently reliably available. So, I can’t get any of my customers to put it on their menus or put it on their shelves. Because it’s here today, it’s gone tomorrow. And then, you know, you start building up a loyal following of customers, and then it disappears.”

“Generally speaking, so far, when we’ve talked to the main distributors that are selling to the high-end restaurants or the high-end retailers, their question has been proved to me that it’s going to be here, and it’s going to be here consistently reliably. It’s been their number one concern question.”

Certifications - Distributors want the product(s) to be certified albeit there is not currently any specific most preferred certification. Icelandic product is ASC ASC-certified. Organic Arctic char

is difficult and expensive to produce. The current market does not support a business case for organic certification.

Size – The Arctic char customers are looking for bigger fish and bigger fillets. They want a 5 lb fish while most Canadian production is 3.5 lb.

Fatty Acid Profile – Arctic char has high levels of Omega-3 Fatty Acids and is being positioned by some marketers as the healthiest salmonid.

9. Challenges/threats facing Arctic Char

9.1 Market-related challenges

Consumer awareness – Identified by some stakeholders as the number one marketing challenge to the business and would require lots of consumer education. *“After many years of doing this, we still get people asking – what is char?”*

Arctic Char price point – Arctic char is priced higher than both salmon and trout. *“On the seafood counter, it's going to sit there besides salmon, you've got a number of people who are going to look at that and say, I don't know what that is. And it's four times more expensive than I know what this is. So, I'll just buy the salmon that I know and I'm comfortable with.”*

Familiarity, popularity, and awareness of other local fish - Arctic char will face competition from other well-established species that have high consumer awareness and appreciation. i.e. pickerel – *“So pickerel is a real big one in Manitoba, and trying to convince people to buy char instead of pickerel has always been a challenge. Because people know pickerel, they grew up with pickerel, and all of a sudden along comes this char with a strange name that sounds like somebody burnt something and now he's trying to sell it to me can be a challenge.”*

Retail trends – Some stakeholders noted that retailers are currently less interested in diversifying, and that the seafood counter is quite full.

Lack of consistent supply – Arctic char is not consistently available.

9.2 Product - Technical challenges

Variable Growth and Pale colour – Many genetic strains of Arctic char have variable growth and variable pigmentation. There continues to be a need for more development of the genetics of Arctic char to address these factors. This includes triploid strains that have high levels of deformities.

Off-Flavours – Arctic char grown in RAS facilities need to be depurated to eliminate off-flavors. This process takes up to 30 days, reducing both production and efficiency. This seems to be a bigger issue with Arctic char than other salmonids.

Filleting Capacity - Arctic char is more difficult to process than other salmonids. Maintaining a premium product is very difficult on automated filleting lines with better outcomes with hand filleting. An opportunity exists to utilize existing filleting capacity for the wild fishery in Manitoba. However, this capacity is only available in off season for fishing.

Shelf-Life - Shelf life (tank raised) is 10-12 days compared to 14 days on salmon and trout (net pen raised). Depuration, harvesting, and processing practices need to be improved to obtain a better shelf life. The feed also influences shelf life so custom diets may also improve shelf life.

9.3 Competitive Challenges

Icelandic Arctic Char – Iceland is the world leader in Arctic char with approximately 75% of the total production. *“Number one, you've got Iceland, and they can grow this fish for a lot cheaper than anybody in the world - They've also got nice consistent fish that grow nice consistently. Their government has poured millions of dollars into creating broodstock, breeding programs, creating the perfect fish.”*

Iceland has access to ideal water, including freshwater and brackish water which is very low temperature at 5-6 degrees Celsius. Producers also have access to **geothermal water** that allows them to totally control water temperatures, resulting in good growth and good quality. This is a competitive advantage over Canadian producers.

European countries like Iceland, Sweden, and Norway have identified aquaculture as a key area of economic development and have invested heavily in support of the sector.

9.4 Other Challenges

High feed prices – There is no local feed production, so feed prices are high and going higher due to increasing ingredient and transportation costs.

Shipping/transportation networks – Shipping costs can be quite high due to remote locations of aquaculture operations and hard to access.

RAS Facilities issues – Operating and maintaining RAS facilities requires skilled labor and technical support. Issues with the operation of RAS have resulted in water quality problems, stress, poor feed intake, and poor growth.

10. Opportunities for Arctic Char

10.1 Marketing and Sales Opportunities

Food services – For many stakeholders, high-end restaurants present an opportunity to expand sales of Arctic char, particularly in Vancouver, Toronto, and Montreal. Several suggested that

Arctic char could displace some salmon consumption in independent restaurants and to a certain extent larger high-end chains such as The Keg. Higher-end restaurants have a price point that supports the cost premium of Arctic char.

Product positioning and branding - Focus on product characteristics such as mild taste – this positions Arctic char as a ‘less fishy’ salmonid with a milder and sweeter taste profile and as a premium brand for special occasions.

“It’s going to require a lot of focus work on just branding Arctic char as its own. It’s not an Atlantic salmon, it’s not a steelhead, it’s not a trout. It’s its own fabulous product.”

Market to independent seafood retailers – stakeholders do not envisage Arctic char being sold in larger supermarkets and superstores.

Market to high-end restaurants - *“People are always willing to try something new at a restaurant than commit to it and take it home and not know what to do with it.”*

Government participation - The **Manitoba Government** needs to take an active role in supporting the marketing efforts of the Arctic char industry and participate and support the marketing plan and efforts of the industry in Manitoba.

“That’s really one of the things that I think Manitoba, whether it’s Ag Manitoba, or DFO, Manitoba or whatever, they could absolutely play a role in if they wanted to look at becoming the mecca of Arctic char for Canada. I look at Quebec maple syrup, and I understand that everywhere in North America you go, you think maple syrup, they’ve heard of Quebec. And that province really rallied around that concept and did a great job of creating an environment in North America where everybody knows that the best maple syrup comes from Quebec. Manitoba can do that for Arctic char.”

Promote ‘Made in Canada’ - Build awareness for Canadian Arctic char and promote how it helps the Canadian/local economy to buy Canadian/local. *“I’m more apt to buy something from Canada than Iceland, I have no loyalty to Iceland. For me, it’s just like logistical things. So, you know, can the logistics make sense? Is the product comparable in quality? If it is, then it’s an easy decision. The quality would have to be comparable in terms of colour and flavour.”*

Sell more fish to Western Canada (geographic advantage over Ontario).

10.2 Strategic resources and infrastructure opportunities

Water temperatures - *“Arctic char needs between 6- and 11-degree water and the aquifer that we’re sitting on top of, and Manitoba, has the exact temperature profile that’s ideal for Arctic char.”*

Electricity rates in Manitoba – *“If they have cheap power..... these types of RAS operations are never going to afford the Ontario Hydro rates.”*

Road Infrastructure - Ability to get trucks in and out from farms and processors.

10.3 Competitive Opportunities vs. Iceland

Increased freight costs – if shipping costs from Iceland become prohibitively expensive, it could encourage wholesalers/distributors to purchase local Arctic char.

Size advantage for Canadian Char – Icelandic char is coming in smaller sizes than what can be grown in Canada.

Delivery disruptions – during volcanoes or other weather events, planes can’t leave.

11. Critical Success Factors for Arctic Char in Canada

In summary, stakeholders were asked what the critical elements for the future success of Manitoba producers were. Feedback in terms of key themes is presented below.

Produce a **quality product** consistently – (taste, colour, and firmness of flesh) to justify a premium price.

Increase awareness at all levels of the seafood supply chain for seafood buyers (food service and retail) and **consumers. Educate** consumers and ensure they understand the premium value that Arctic char represents.

Raise the profile of Arctic char through **marketing and promotional** efforts targeted to end-use consumers.

Focus the target market on **current fish eaters** who have good knowledge/experience in the seafood category.

Focus on **high-end restaurants/food service** sector.

Align with a large **distributor** in Toronto – i.e. Seacor Seafood or Sea Merchants.

Price considerations - For Arctic char to grow the market, its price would have to drop.

Improved Genetics - better growth, more consistency, and superior flesh quality, improving output and profitability.

Infrastructure Ability to build infrastructure (Electrical) to create additional production capacity.

12. Conclusions

Arctic char is a very niche market in Canada and the United States with slow but steady growth. Iceland is the major Arctic char producer and dominates all international markets, including the United States.

There is an opportunity to expand production in Canada to utilize existing infrastructure and displace Arctic char imports into Canada. For the Manitoba Arctic char industry to be successful and gain market share in Canada, they need to focus on consistent product quality, proper infrastructure development, and a marketing awareness campaign.

Arctic char represents a great opportunity for Manitoba aquaculture. Current production could expand 10-fold to 400 tonnes to meet domestic Arctic char market opportunities. This could create a Manitoba aquaculture industry of \$4 Million in annual sales. There must be a focus on high-end retail and food service with premium quality Arctic char.

APPENDIX MATERIALS

List of Stakeholder Consultation

Rob Black, Dean Kerr and Dave Bergunder
Freshwater Fish Marketing Corporation
Winnipeg, Manitoba

Matt Caudle, President
Caudle's Catch Seafood
Kitchener, Ontario

Bruce Hardy, President
Myera Group
Winnipeg, Manitoba

Doug Hotson, Chief Operating Officer
Sapphire Springs/Icy Waters
Winnipeg, Manitoba and Whitehorse Yukon
Whitehorse, YT

Eric Kaiser, President
Aquanor Ice Fresh/ Samherji fiskeldi
Boston, MA

Christo du Plessis, CEO and Arni Pall Einarsson, CCO
Matorka ehf.
240 Grindavik, Iceland

RJ Taylor, Owner
Cedar Crest Trout Farms
Managing Director, Ontario Aquaculture Association
Hanover, Ontario

Julie Tuk, Key Account Representative and Fresh Purchasing Mariner Neptune Fish and Seafood Company Ltd.
Winnipeg, Manitoba

Wendy Vandersteen and Paul Fitzpatrick
Road 17 Arctic char
Oliver, British Columbia

Peter Waldner, Owner/Operator
Ridgeland Aqua Farms
Anola, Manitoba

**A Proposed New Production Model “The Circular Economy”
Bruce Hardy, Myera Inc.**

The purpose of this report was to look at the Arctic char market in Canada and the United States and look at how to increase sales. During the stakeholder discussions, an Arctic char expert and Indigenous businessman, Bruce Hardy from Myera Inc., presented a new model for Arctic char production in Manitoba which he named “The Circular Economy.”

Bruce is proposing a new model for aquaculture in Manitoba based on “The Circular Economy,” utilizing all the wastewater and nutrients for traditional medicine (based on root plants) and wild rice production.

He believes in building 50+ small Indigenous RAS units throughout Manitoba. There will be a joint program with all Arctic char producers to develop better genetics using the Nayak strain of Arctic char. The Circular Economy group would also work together to reduce costs, especially feed, which is currently 54% of the cost of Arctic char.

He believes that Manitoba has a competitive advantage due to low land prices and low electricity costs (he suggested 3.5 cents per kWh), resulting in only 12% electricity cost of production.

Myera is also doing clinical trials on new medicines based on root plants and is involved in pilot projects to produce wild rice for local Indigenous communities.

The purpose of “The Circular Economy” concept is to create a better story for Manitoba Arctic char production.