



CAUGHT UP in **catch shares**

by Ecotrust Canada and the T. Buck Suzuki Environmental Foundation



CAUGHT UP IN CATCH SHARES

Ecotrust Canada and the T. Buck Suzuki Environmental Foundation
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Special thanks to our reviewers and our fisherman interviewees.



FOREWORD

Although it is rarely done with reports, the authors of this study feel it important to state our perspective, if you will, at the outset. We do this because we know that a person's values and beliefs inevitably shape how he or she engages with the world – both in form and in function. We expect that some who are reading this paper will ponder and nod, and others will dismiss our findings out of hand or argue vehemently for other conclusions. We will consider it a success if the work raises eyebrows and sends people scurrying into the datasets to try to discount our analyses. We are hopeful that this report will help fuel a discussion that Canadians need to be having at this juncture – the discussion about the kind of country and the kind of economy we want to grow and foster for future generations.

Our positional bias is this: the T. Buck Suzuki Environmental Foundation and Ecotrust Canada actively support the development of resilient local and regional economies, and we tend to focus on the smaller places where people have lived for generations. Both organizations do this work for two reasons: first, because we understand the fundamental role that these communities play as stewards of the land and sea, and second because the world has repeatedly demonstrated that economic development without support for *both* rural and urban communities leads to myriad social, cultural, and financial challenges.

In Canada, we have the opportunity to bring better balance to our economy. Unfortunately, we share the view that Canada is drifting steadily away from policies, ownership models, and capital frameworks that enable rural communities to access and benefit from adjacent natural resources. Both of our organizations regularly work with the commercial fishing sector; we feel it represents the full spectrum of environmental, social, cultural, and financial conditions that define a vibrant economy. But we do not believe Canada's drift is confined to commercial fishing. Similar dynamics are present in other resource-based sectors, including forestry, food, mineral extraction, land management, and fresh water.

In 2004, Ecotrust Canada published [*Catch-22: Conservation, Communities and the Privatization of BC Fisheries*](#). This report investigated the economic, social, and ecological impacts of federal fisheries licensing policy, particularly the use of individual transferable quotas (ITQs). In 2009, Ecotrust Canada released [*A Cautionary Tale*](#), describing eight lessons to be learned from BC's experience with ITQ fisheries. Both reports raised questions and cautions about how ITQs are designed, managed, and implemented.

In 2013, we jointly published [*Understanding Values in Canada's North Pacific*](#), identifying the full spectrum of tangible and intangible values that fisheries contribute to the survival and well-being of BC's smaller communities, including the communities of several First Nations whose territory is situated on the coast or up river. The report highlighted a need for fisheries management policies to incorporate this larger suite of values in decision-making to find more viable, practical, and equitable solutions to the challenges facing the fishing industry and the communities that depend on it.

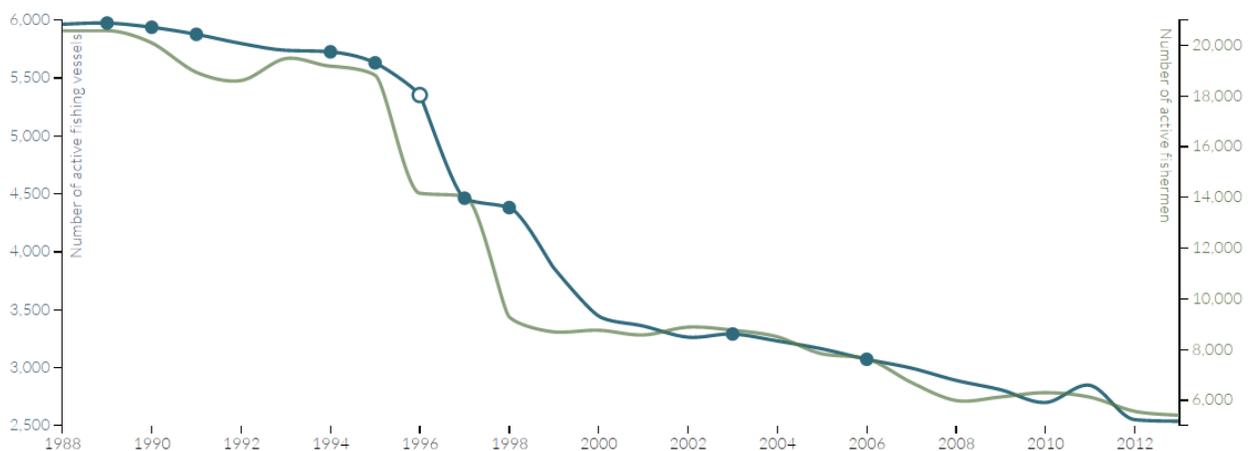
This report extends and combines these analyses, offering an updated look at the significant and challenging impacts that catch share policies and practices have been having on fisheries, fishermen, and fishing communities – our Canada – over generations.

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INTRODUCTION

There is no denying the compelling statistics that have marked the passage of time in BC's commercial fishing industry. Since the 1980s, the fleet has shrunk by 60%. The number of fishermen is down by 70%. Licence and vessel ownership has steadily shifted from individuals to companies; from rural to urban areas. Non-fishermen are controlling quotas and leasing them back to the industry, pocketing as much as 75% of the landed value. Processors looking to secure production are faced with a shrinking pool of fishermen. Federal policies and marine conditions have made the business of fishing more expensive and less predictable. Consumers are paying more and fishermen are getting less. The well-being of once-vibrant coastal communities continues to decline.¹ Curiously, neither advocates for fishermen nor advocates for fish are happy.



Prince Rupert has felt this change. In the 1980s, this small city of 18,000 residents was booming. The smell of success, in the form of fish and diesel, permeated the salty coastal fog. The harbour, at the very heart of the city's sense of community, bustled under a constant din of boat motors, screeching gulls, and the whine of fish processors running at full tilt.

Today, nearly a quarter of the town is gone and the harbour is all but silent save for a few sailboat halyards chiming in the heavy mist. Fishing boats are still tied here, but many sit listless and idle for much of the year. Some, abandoned by their owners long ago, crumble slowly into the sea.

And yet – though this picture is all too common on BC's coast – hope lives here still.

ABOVE / Commercially licensed vessels (blue line) and fishermen (green) as percentages of their 1988 values. Dots indicate dates of catch share implementations; circle is the salmon fishery's Mifflin Plan.

Sources: DFO Statistics and Integrated Fisheries Management Plans.

INTERACTIVE /

View an interactive version of this graph at: <http://data.ecotrust.ca/itq>

¹ Robinson Consulting and Associates Ltd. "Socio-economic and Cultural Overview and Assessment Report for the Pacific North Coast Integrated Management Area," Fisheries and Oceans Canada, Ecosystem Management Branch, Oceans Division (2012).

The *BC Maid II*, hailing from Qualicum Beach, BC, proudly sits at the Prince Rupert dock, her main port for the summer. A small stove keeps a kettle hot and the cabin warm and cozy, warding off the morning chill. Inside, Captain Bob Burkosky waits for a change in the weather. He's been fishing salmon and lingcod in BC's waters for almost 40 years, and has witnessed the evolution of the commercial fishing industry. "I started fishing in the spring of 1975. I bought an old, worn-out gillnetter and it looked like a great adventure, looked like something I wanted to do."

“ I liked the idea of being my own boss. I wanted to – I guess I felt the same way a lot of people who run their own businesses feel, and that's that they would like to build something.

Farther down Prince Rupert's harbour, the *Lucky Star No. 1* is also doing pretty well. A 37-foot fiberglass boat, she was built in Delta, BC in 1979. Captain Kendall Smith bought her soon after, and the two have fished the province's north coast ever since. Like Burkosky, Smith is what you might call an old salt.

“ I started fishing with my father as a child when I was 11, off and on up until the age of 16 - just went out as father-son. I've been earning money from fishing since I was 16. I've fished every year up until now and I'm 58. So that would be 42 years.

Henry Clifton is a member of the Gitga'at Nation in Hartley Bay, just 145 km south of Prince Rupert. Like the others, he has also been fishing as long as he can remember.

“ I started fishing with my parents when I was a little boy, probably a baby on the boat. And I started – my dad hired me out on the seine boat to be skiffman, I think I was 11 years old.

In each coastal town, residents and fishermen² like Burkosky, Smith, and Clifton talk openly of the need to redesign and rebuild the commercial fishing industry. To them, it is the cornerstone of their local economies and anchors the social and cultural fabric of their communities. They have come to truly understand the full circle of its worth.

Still, pressures on the commercial fishing sector continue to mount from environmental, economic, technological, and cultural fronts. Long-term impacts from climate change; the reconciliation of First Nations Rights and Title as a social, economic, and political imperative that must be honoured; ever-increasing costs associated with fisheries management, vessel operations, public health, and consumer preference; and increased competition for marine space all threaten this industry and the communities that rely on it. Without a thoughtful and timely intervention, fishermen and their communities will continue to ebb away.

² "Fishermen" is the term voted on in 1996 by the women (the men abstained) in the United Fishermen and Allied Workers Union (UFAWU). They decided that this term would encompass both men and women working in the fishing industry.

Fisheries regulators have tested new policies and management tools in an effort to balance these pressures. In the 1980s, individual transferable quotas (ITQs) and other forms of catch shares became popular management tools. Since then, BC has been held up as the golden child of catch shares, proof that the system works.

But does it?

With a shrinking industry and increasing poverty in so many coastal communities, does catch share management really work as advertised?

This report takes a deeper look at the ripple effects of catch shares, providing an up-to-date evaluation of BC's current catch share regime to help inform the discussion about future directions for commercial fisheries. If BC is to be seen as an example of how to do fisheries management "right,"³ it is our responsibility to make sure they truly are benefitting those who make their livings on the sea.

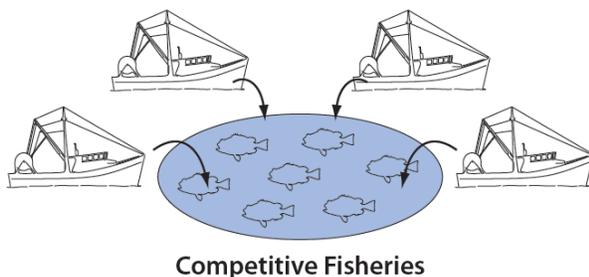
³ Grimm, Dietmar, et al. "Assessing catch shares' effects evidence from Federal United States and associated British Columbian fisheries." *Marine Policy* 36.3 (2012): 644-657.

A RISING TIDE IN FISHERIES MANAGEMENT

Riding a surge of popularity since the 1980s, catch shares are now in effect in 500 fisheries in 40 countries. In recent years, however, many of the earliest catch share systems have begun to show their age, developing unintended negative consequences for the next generation of fishermen – especially small scale fishermen and fishing communities they were ostensibly enacted to protect.

In Canada, Fisheries and Oceans Canada (DFO) is the federal government agency responsible for maintaining environmentally and economically sustainable harvests on behalf of all Canadians.⁴ It is a challenging task that is further complicated by the intricacy of counting fish at sea. For decades, DFO has experimented with tools to effectively manage multiple species and a wide variety of fishing practices, each tool hopefully designed to strike a balance between the three pillars of success: environmentally viable fish stocks, a socially acceptable fishery, and an economically viable fishing industry. DFO's work is scrutinized and often criticised by industry, environmental groups, and other marine users. Finding common ground has not been easy where the needs of livelihoods, communities, cultures, and species are so intertwined.

One such controversial DFO decision has been the introduction of catch shares. Almost every BC fishery is subject to a **total allowable catch (TAC)**, a maximum harvest that is set using scientific models and stock assessment data. TACs limit fishing operations, ensuring that enough fish are left in the water each season to reproduce and maintain fish populations.



In **competitive fisheries**, all licence holders enjoy the same access. DFO sets a fleetwide TAC (represented at left by the oval), and all licence holders compete for fish until that TAC is reached. The fishery then closes to prevent overfishing.

⁴ Fisheries and Oceans Canada (DFO) has the lead federal role in managing Canada's fisheries and safeguarding its waters. The Department:

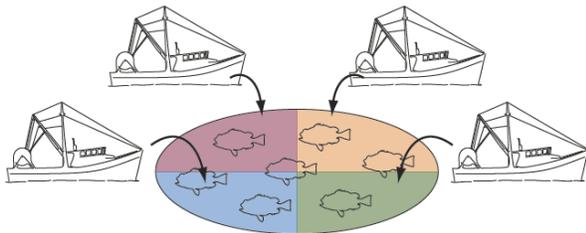
- supports strong economic growth in our marine and fisheries sectors by supporting exports and advancing safe maritime trade;
- supports innovation through research in expanding sectors such as aquaculture and biotechnology; and
- contributes to a clean and healthy environment and sustainable aquatic ecosystems through habitat protection, oceans management, and ecosystems research.

The Department's work is guided by five key pieces of legislation:

- [*Oceans Act*](#);
- [*Fisheries Act*](#);
- [*Species at Risk Act*](#);
- [*Coastal Fisheries Protection Act*](#); and
- [*Canada Shipping Act, 2001*](#) (Transport Canada-led).

From: "Mission, Vision and Values." *Fisheries and Oceans Canada* (2013). <<http://www.dfo-mpo.gc.ca/about-notre-sujet/org/vision-eng.htm>>.

Competitive fisheries may be subject to other restrictions to protect fish stocks and habitats, including gear types, season openings and closures, bycatch restrictions, and fishing locations.

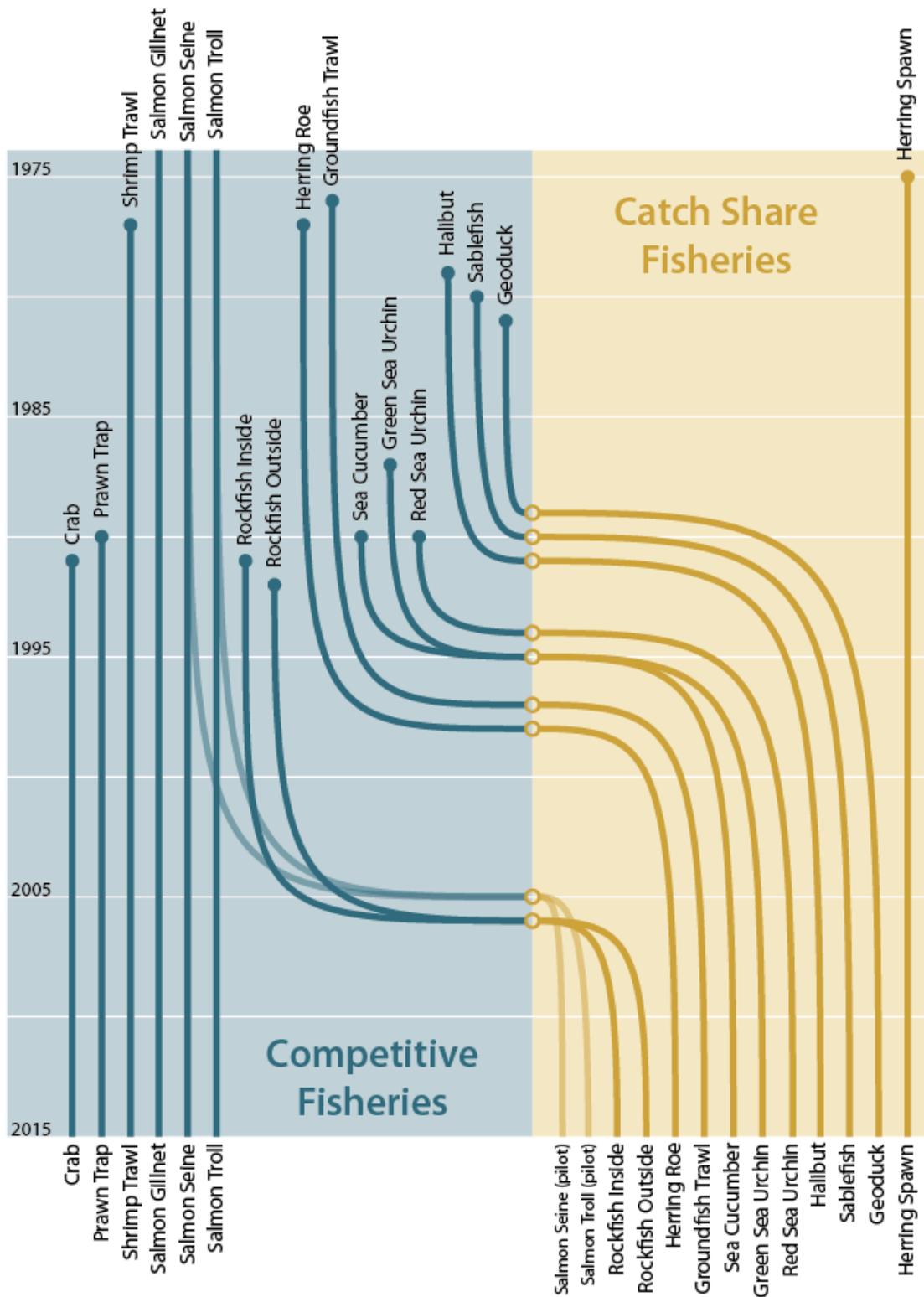


Catch Shares

Catch shares take the idea one step further, dividing the TAC into individual quotas. Catch shares are intended to secure access for fishermen, prevent overcompetitive “races for fish,” and bring an element of measurable individual accountability to fishing.

Catch shares, as structured in BC fisheries, are market-based management systems. Unlike competitive fisheries, portions of the TAC (represented by quota) can be bought and sold – with no requirement that the purchaser be the one to fish it. And quotas are key: fishermen may only catch as much fish as their quota allows. If they want to fish more or if they catch more than their quota allows, they need to buy or lease additional quota to cover that catch.

More than half of BC’s commercial fisheries are now managed under catch shares, essentially privatizing access to a common property fish.



ABOVE / Timeline of BC's commercial fisheries, 1975-2015. Solid dots show when the fishery began limited licensing management under DFO; open circles show when competitive management transitioned to catch shares.

Source: DFO Integrated Fisheries Management Plans.

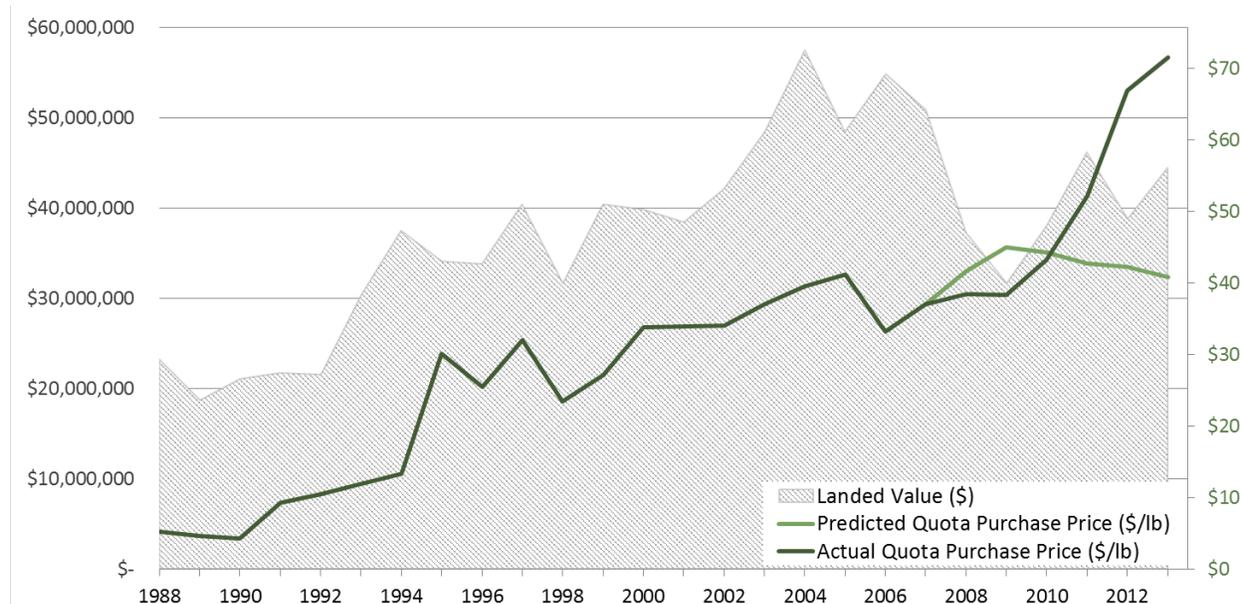
ONE SIZE FITS FEW

Many have pronounced catch shares a universal cure for ecologically and economically sound fisheries management. To test this theory, we examined the effects that two decades of catch shares in BC have had on the economic viability of fishing for fishermen and fishing communities.

SUPPLY AND DEMAND

Under DFO's rules in BC, quota, representing percentages of the TAC for various fish species, can be bought and sold by anyone – including people and corporations that do not fish – at any price on the open market. This policy comes in stark contrast to law dating back to the Magna Carta: the ocean is a public resource and the fish in it are owned by all citizens.

Fisheries managers regularly raise and lower the TAC to strike a balance between the economic and environmental interests of each fishery, causing the quota associated with each TAC to fluctuate accordingly. As a result, prices follow a typical supply and demand curve: when supply (TAC) decreases, demand for quota goes up and drives quota prices higher. This also works in-season: if a fisherman catches more fish than his quota covers, he must quickly secure access to additional quota or risk penalties, making him more susceptible to price inflation or predatory lending practices. Processors, needing to ensure they have adequate fish supplies to meet their market commitments, use quota leasing as a way to secure their needs. As is the case with any commodity, this has led to speculative investment on several fronts.



In the halibut fishery, for example, high demand for a limited supply of quota under a decreasing TAC has caused purchase prices to skyrocket.

ABOVE / Halibut quota purchase prices, adjusted for inflation (2014 dollars), compared to the commercial TAC (expressed as landed value).

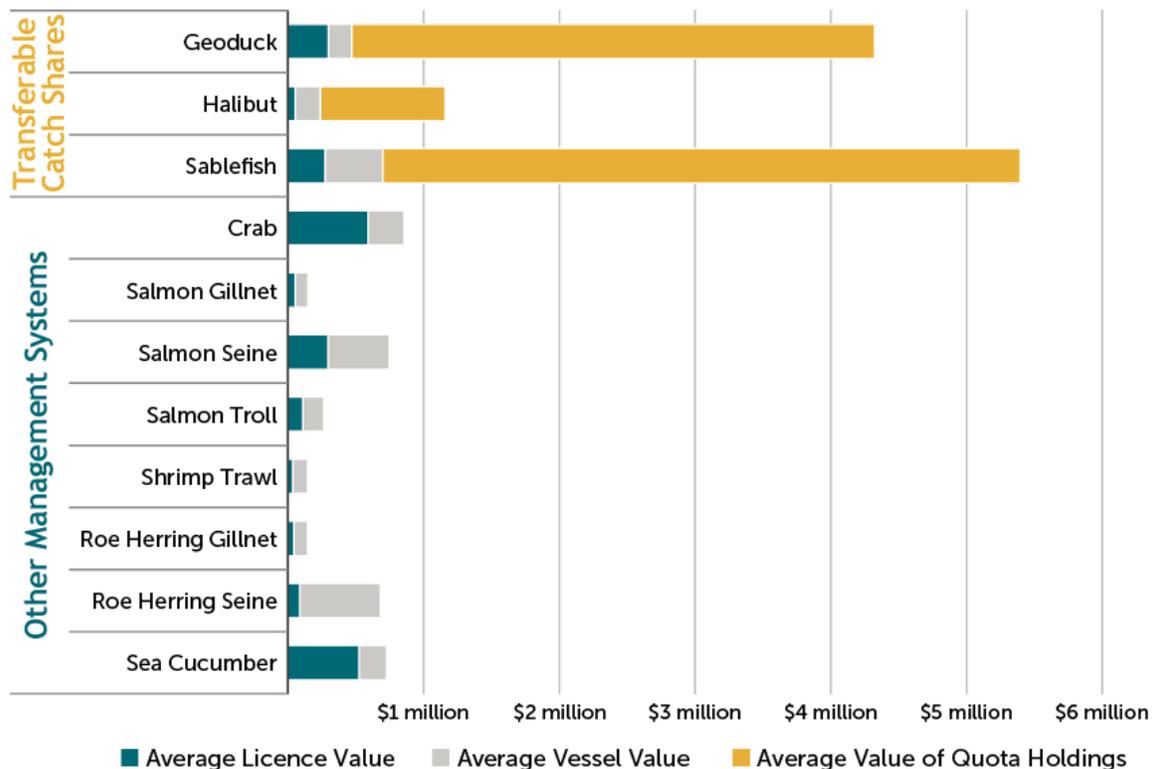
Sources: Nelson Bros Fisheries Ltd (2013 and 2006) Analysis of Commercial Fishing Licence, Quota, and Vessel Values; Nelson Bros Fisheries Ltd (2008) Pacific Halibut IVQ Price Forecast; Bank of Canada consumer price index.

ITQs were introduced in the halibut fishery in 1991. Twenty-four years later, quota prices continue to rise with no sign of stopping. In 2008, DFO commissioned a report by Nelson Bros Fisheries⁵ which assessed the potential impact of reallocating commercial halibut quota to the recreational fishery, thus reducing the amount of quota available to commercial fishermen. The study predicted that even with a further-limited commercial fishery, the price of halibut quota would soon level out and begin to decline. Instead, the price of halibut quota has nearly doubled – from \$38 per pound in 2008 to more than \$71 just 5 years later.

⁵ Nelson Bros. Fisheries. "Pacific Halibut IVQ Price Forecast." (2008).

THE MONEY PIT

A common catch share myth suggests that quotas reduce capitalization in fisheries by allowing even the most poorly-equipped boats to compete successfully with vessels sporting the latest and greatest gear. And to some extent that's true; the race to buy the best vessels has indeed diminished. But in its place has come competition over access, where fishermen must sink their money into ever-increasing quota purchase and lease prices – a different kind of capitalization. Quota prices have not displaced costs; they have simply added to them.



The expense of quota purchase on top of already-steep start-up costs is a major barrier for people trying to get into the industry, and compromises the industry's ability to build the next generation of fishermen. Unfortunately, the income that fishermen receive from these licences is not increasing at the same pace. Indeed, compared to the income earned from these fisheries, quota costs are disproportionately high.

ABOVE / Market value in BC fisheries by type of fishery management, 2012. Quota holdings reflect the purchase price of the average amount of quota held by an active fishery participant.

Sources: Nelson Bros Fisheries Ltd (2013) *Analysis of Commercial Fishing Licence, Quota, and Vessel Values*.

Sablefish



Halibut



LEFT / Cost of access vs. gross revenue from one pound of fish.

Sources: Nelson Bros Fisheries Ltd (2013) Analysis of Commercial Fishing Licence, Quota, and Vessel Values; DFO Data Unit (2012) Summary Commercial Statistics – Dockside Monitoring Data.

The difference between purchase price and earned revenue means that in most cases it would take decades for a fisherman to receive a return on his investment – and that is without considering the other costs of fishing. In the graph above, the gross revenue represents a fisherman’s income from each pound of fish before expenses, including crew share, are paid. The large gap between costs and earnings places a major burden on small-scale fishermen already in the industry looking to maintain or expand their ability to fish – and it’s downright prohibitive for a new generation looking to start their careers.



How stable is an industry that’s confined to or totally in the hands of older men that are now losing energy and you’ve restricted younger guys from getting in?

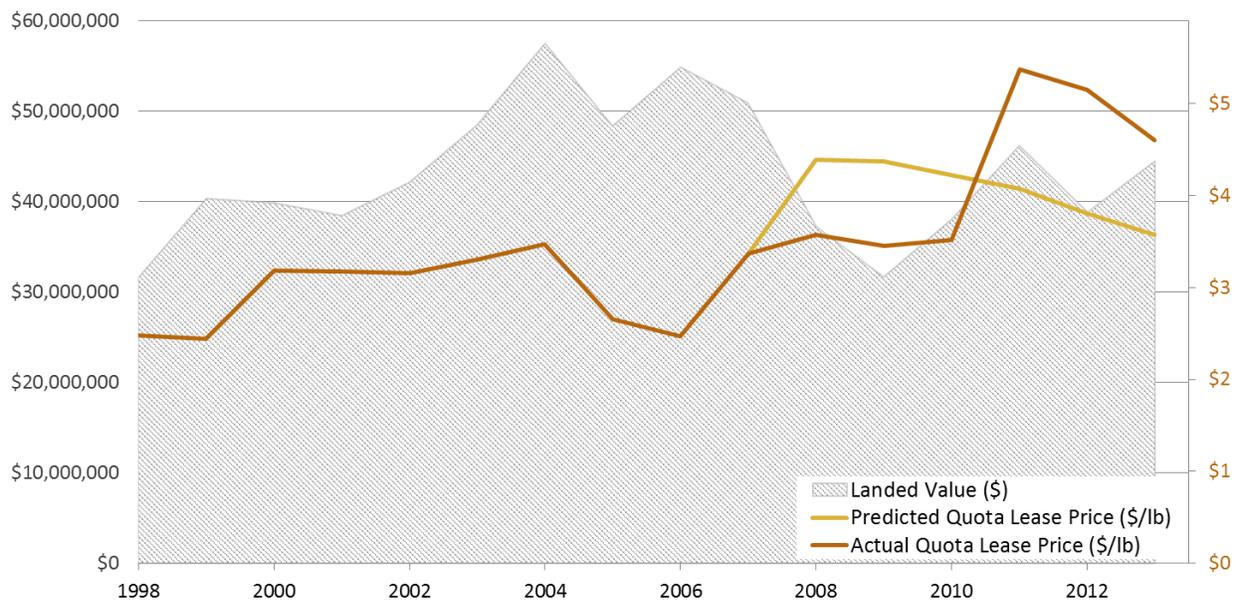
So where do fishermen go if they can’t afford to buy licences or quota?

They lease. Some of the fishermen who were gifted quota when the catch share system was first introduced have elected to retain their allocations after retiring from fishing, leasing the quota rather than selling it to new entrants. These “armchair fishermen” typically lease to corporations or processors willing – and able – to pay higher prices. With the luxury of capital, these companies can speculate on lease prices, contract fishermen to supply fish at lower prices, and stack their quota onto fewer vessels to reduce their operating costs. Fishermen trying to stay afloat essentially become the pawns in this leasing game.



The ones who first get these quotas gifted [from DFO] are the winners. Every cycle of new buyers in, it gets costlier and costlier, and less and less. And then slowly, individuals don’t buy, corporations buy. So there are zero new entrants as we move into more and more ITQ fisheries.

Fisherman or corporation, leasing does not come cheap. Just as quota purchase prices have risen, so too have quota lease prices.



Similar to quota purchase prices, the behaviour of the quota lease market has been difficult to predict. Where the 2008 Nelson Bros Fisheries report expected that halibut lease prices would quickly stabilize and decrease, the market has, in reality, taken much longer to respond. The sharp price increase in the 2011 season, when a portion of the commercial halibut allocation was reallocated by DFO to the recreational sector, demonstrates the direct effect of a decline in available quota. As processors scrambled to get the fish they needed to satisfy their markets, and fishermen tried to make up for the shortfall in catch, the cost of leasing jumped up. This is a pattern that may reoccur if the commercial TAC continues to decline.

ABOVE / Halibut quota lease prices, adjusted for inflation (2014 dollars), compared to the commercial TAC (expressed as landed value).

Sources: Nelson Bros Fisheries Ltd (2013 & 2006) Analysis of Commercial Fishing Licence, Quota, and Vessel Values; Nelson Bros Fisheries Ltd (2008) Pacific Halibut IVQ Price Forecast; Bank of Canada consumer price index.

Fishermen are entrepreneurs, running small businesses on the sea. As with any small business, balancing expenses and revenues is the key to success. When lease prices climb, fishermen have to make some hard choices: do they spend money on buying or leasing quota so they can access the fish, or do they spend on vessel maintenance, gear, food, safety equipment, or insurance? Fluctuating seafood prices, fuel prices, foreign exchange rates, mid-season closures, and other factors can throw a wrench in the very delicate balance of successful enterprise management. And because the income flow only starts when a fish is landed at the dock, **it's the fisherman who assumes all of the upfront financial risk.**



The risk is very plain from the start: take the risk or don't fish – not like an ordinary business where you can make the best economic forecast and then use every possible means at your disposal to make your investment work. If the fish don't come back and you're forced to make an investment and you can't fish because there's no fish, you lose.

In the meantime, the amount of money devoted to paying lease fees continues to grow, leaving captains and their crews with few options for making decent livings and setting up serious barriers for any crewman looking to build a business of his own.



When you explain [to fishermen starting out] what they have to go through, they just – you know, it’s so daunting. You used to be able to start as a crewman, because if you got a job on halibut you could make some pretty good money, but that’s changed now because you’ve got to help the skipper pay for a leased quota.

I get a young crewman, he can work on the deck, sure, but can he make enough money on this boat to buy quota? I don’t know. I don’t think so.

AN INDUSTRY DIVIDED

Quota leasing represents a significant cost in an industry with already-slim margins. Lease fees siphon money out of the industry into pockets of corporations and speculative investors. But what’s the worst that could happen?



If fishermen had to lease all licences and quotas currently managed under catch shares, more than \$82 million in landed value would be extracted from the industry. **That’s nearly half of all money earned by fishermen out on the water.**

This inequity begs the question: Should fishing licences be issued for fishing or for speculative investing? Is it ethical for our food producers to struggle while investors profit from their work? Where do DFO’s responsibilities lie?

LEFT / Leased vs. landed value if all catch shares were leased.

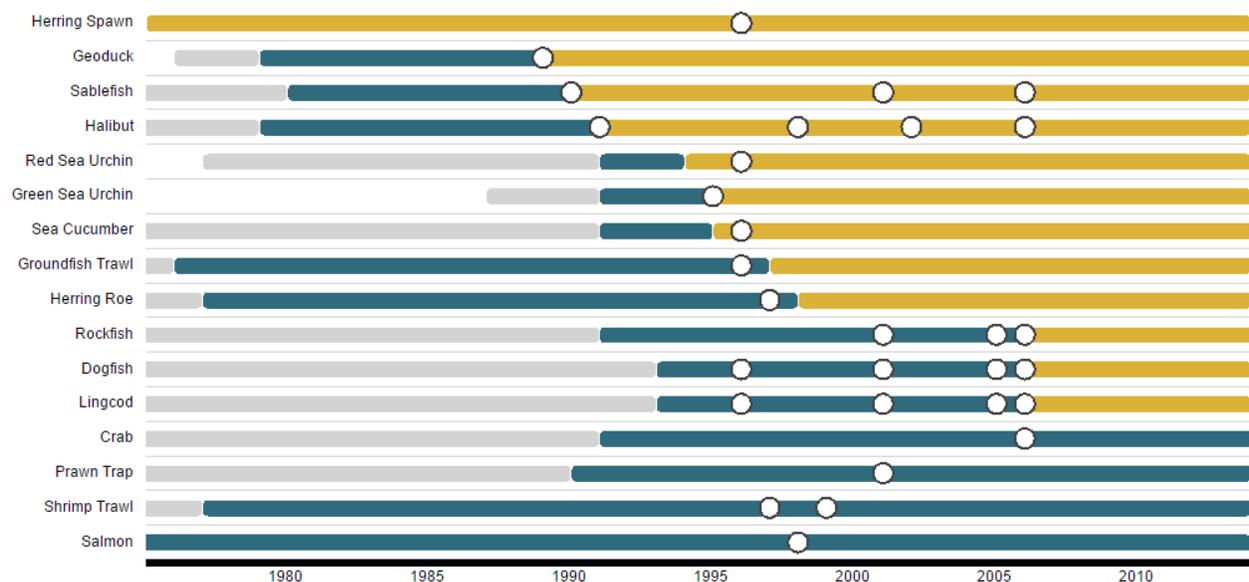
Sources: Nelson Bros Fisheries Ltd (2013) Analysis of Commercial Fishing Licence, Quota, and Vessel Values; BC Ministry of Agriculture (2013) BC Seafood Year in Review; DFO Data Unit (2013) Summary Commercial Statistics – Dockside Monitoring Data.

SCIENCE AND SUSTAINABILITY

Many claim that catch shares improve monitoring and data quality, resulting in easier and more cost-effective fisheries management. The situation in BC, however, tells a different story.

Fishing licences identify the species that can be harvested, known as the ‘target’ species. All other species are considered bycatch. In catch share fisheries, each fisherman must hold a licence, quota for the target species, and quota to cover any accidental bycatch. Fishery managers use a variety of tools to monitor landings of both target species and bycatch.

Catch shares require intensive monitoring and data collection to ensure that each fisherman does not exceed his owned or leased quota. To support this need, many existing monitoring programs are upgraded when catch share systems are implemented, creating the perception that catch shares inherently bring greater scientific rigour to fisheries management.



In reality, catch shares and improved fisheries monitoring are not synonymous. High quality monitoring can be implemented for any fishery, regardless of management regime. A number of competitive fisheries in BC use test fisheries, at-sea and dockside observers, and technology tools to give managers fishery updates. The north coast’s Area A crab fishery, for example, is managed without ITQs and uses one of the most comprehensive electronic monitoring system in Canada to collect video, GPS, and other sensor data on each vessel’s activities. Salmon, perhaps the most prominent of the competitive fisheries, uses both at-sea and dockside observers to monitor catch in real time.

ABOVE / Timeline of science and management in BC’s commercial fisheries, 1975-2014. Periods of competitive fishery management are indicated in blue; catch shares are in yellow. Circles indicate significant changes to monitoring requirements.

Source: DFO Integrated Fisheries Management Plans.

INTERACTIVE /

View an interactive version of this graph at:

<http://data.ecotrust.ca/itq>

Fisheries monitoring does however, come with a very real price. Paying for fisheries observers or onboard electronic monitoring systems can be very expensive – prohibitively so, in some cases. When catch shares were introduced in BC’s groundfish fisheries for example, the combination of bycatch quota costs and monitoring were the straw that broke the back of some of that sector’s smaller enterprises.

For monitoring to be a truly effective aspect of any fisheries management system, it needs to be scale-appropriate, carefully designed with the practical needs and capacities of both regulators and fishermen in mind. This includes a real intention to minimize the cost burden associated with fisheries monitoring. A monitoring system must be fishery-appropriate in cost and scope to avoid a disproportionate disadvantage to smaller boats and lower income fisheries.



It was pretty absurd to require small boat fishermen to advance \$10,000 to go into debt to buy a video monitoring system. So there’s a big cost, and it could be a really big cost to having those systems fail and having to come in off the [fishing] grounds because your electronic monitoring system fails. The monitoring that goes with quotas is an issue that generally ends up being far more expensive than first consideration might make you believe.

Whatever the management system, effective data collection is a crucially important element of responsive fisheries management. With the right investment and design, sound data can be collected under any circumstances. Emerging technologies offer new opportunities for managers and fishermen alike to take advantage of scale-appropriate, high-quality, cost-effective monitoring techniques. Collaboration between regulators, fishermen, and service providers in objective setting and program design is a critical first step.

CASE STUDIES / Any tool – including quota-based management – can be useful if it addresses the full range of ecological, economic, *and* social objectives.

In this report we include a number of case studies to illustrate the good results that can come when these three needs are met, regardless of management system.

CASE STUDY: COOPERATIVE MONITORING AND MANAGEMENT

Vigía Chico Fishing Cooperative, Punta Allen, Mexican Caribbean

Punta Allen is located in the Sian Ka’an Biosphere Reserve in the Mexican Caribbean. This fishing community has a concession that comprises all of Ascensión Bay, an area encompassing 850 km² of coral reefs, seagrass meadows, and soft seafloors. There, fishermen from Vigía Chico Fishing Cooperative harvest lobster (*Panulirus argus*) using artificial shelters known as casitas. Each member is responsible for a plot within the concession and invests in shelters and maintenance activities. Access to the plots is inheritable within families, but cannot be bought or sold. All members deliver the catch to the cooperative, which is in charge of marketing the product.

After 40 years, this management system has proven to be successful ecologically, economically, and socially. Vigía Chico is the largest harvester of spiny lobster statewide. Harvests range from 30-80 tons of whole lobster and 25 tons of lobster tail. The fishery has been MSC-certified since 2012.

A combination of federal regulations and internal rules, as well as self-surveillance, monitoring, and enforcement, have been crucial to the fishery’s success.⁶ Penalties range from fines to expulsion from the cooperative.

Federal Regulations

Closures
Minimum size

Cooperative Rules

Closed membership (except for sons or sons-in-law)
Prohibition of scuba or hookah – only free diving is allowed
Fishers in possession of sub-legal size lobsters will be fined
Fishers in possession of females carrying eggs will be banned

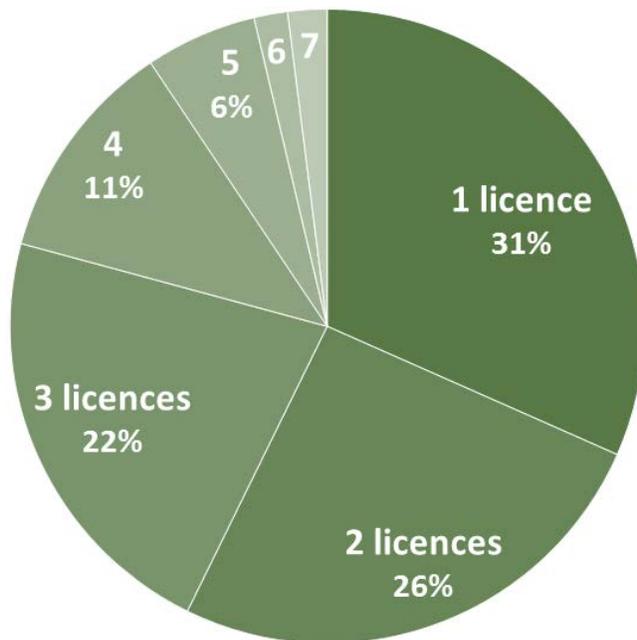
Fishermen have monitored catch and effort since 1975, which has aided in decision-making and development of the fishery’s management plan.⁷ The cooperative has actively helped and provided data to fishing authorities and environmental institutions. In exchange, authorities have supported the cooperative with software and training to digitize data.

⁶ Sosa-Cordero, E., Liceaga-Correa, M.L.A., Seijo, J.C. “The Punta Allen lobster fishery: current status and recent trends.” In: Townsend, R., R. Shotton, H. Uchida (eds.). “Case studies in fisheries self-governance; FAO Fisheries Technical Paper (FAO) no. 504.” *FAO Fisheries and Aquaculture Management Div.*, 2008, p. 149-162.

⁷ Orensanz, José María, and Seijo, Juan Carlos. “Rights-based management in Latin American fisheries.” *FAO Fisheries and Aquaculture Technical Paper*, no. 582, 2013.

GENERATIONS DIVIDED

In 2014, there were 428 commercial or First Nations commercial communal halibut licences. Of the 344 commercial licences, 58 licences held only the minimum amount of quota (0.1% of TAC, approximately 690 lbs) required on a halibut licence – a sure sign that the licence is inactive and the remaining quota has been leased away. Most halibut vessels held multiple types of commercial licences, demonstrating that there is no one “typical” halibut boat. Still, there are major trends in the fishery that can shed light on the financial situation of boats on the water.



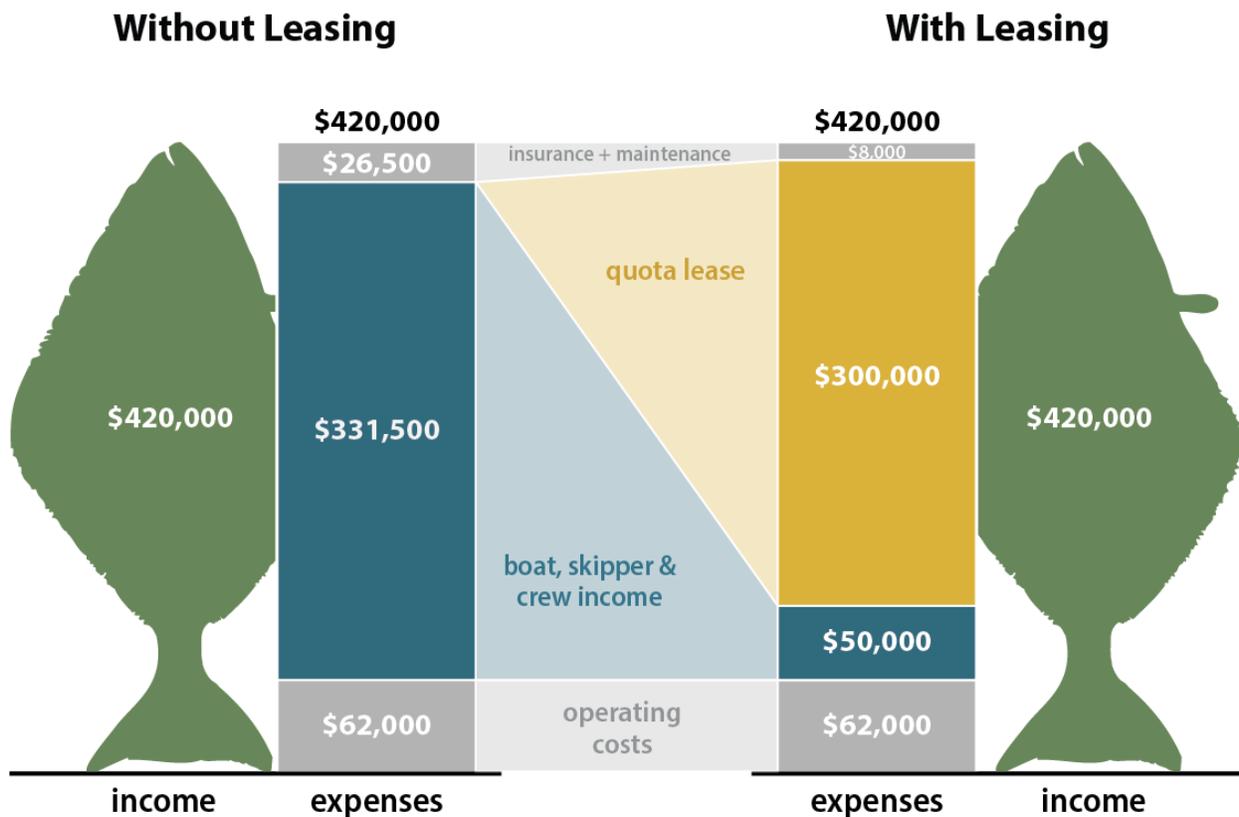
Nearly one third of the halibut fleet focuses exclusively on catching halibut. The median amount of quota held on one of these boats is 12,452 lbs. In 2012, that much halibut would have earned a fisherman more than \$80,000 in gross revenue.

LEFT / All vessels holding a commercial halibut licence, broken down by the total number of licences assigned to each halibut vessel. Vessels with 6 and 7 licences each represent 2% of all halibut vessels.

Sources: DFO Pacific Region Operations Branch, 2014.

Many of these single-licence vessels own the quota that they fish, allowing them to at least break even. In rare cases they may even be profitable. But what happens when the next generation of fishermen enters the industry? If they cannot afford the nearly \$1 million required to purchase a licence and the median amount of halibut quota, they are forced to lease.

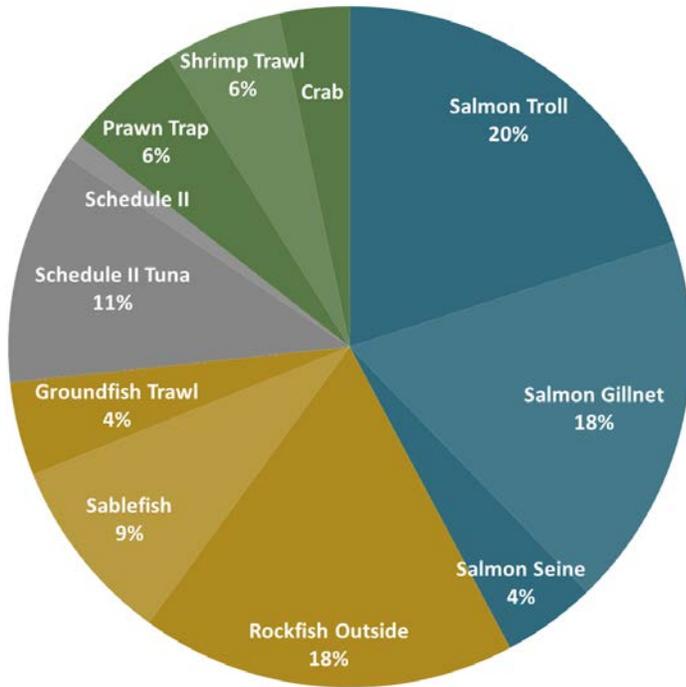
TO LEASE OR NOT TO LEASE



This graph shows typical halibut fishing expenses for 2012, broken down into 4 categories:

- insurance and maintenance – the cost of insuring a boat and keeping it and the fishing gear in good repair
- quota lease – the typical cost of leasing halibut quota
- boat, skipper, and crew income – the amount of money earned after other expenses are paid
- operating costs – the cost of going out on the water, including monitoring, fuel, bait, food for the crew, moorage, ice, and gear storage

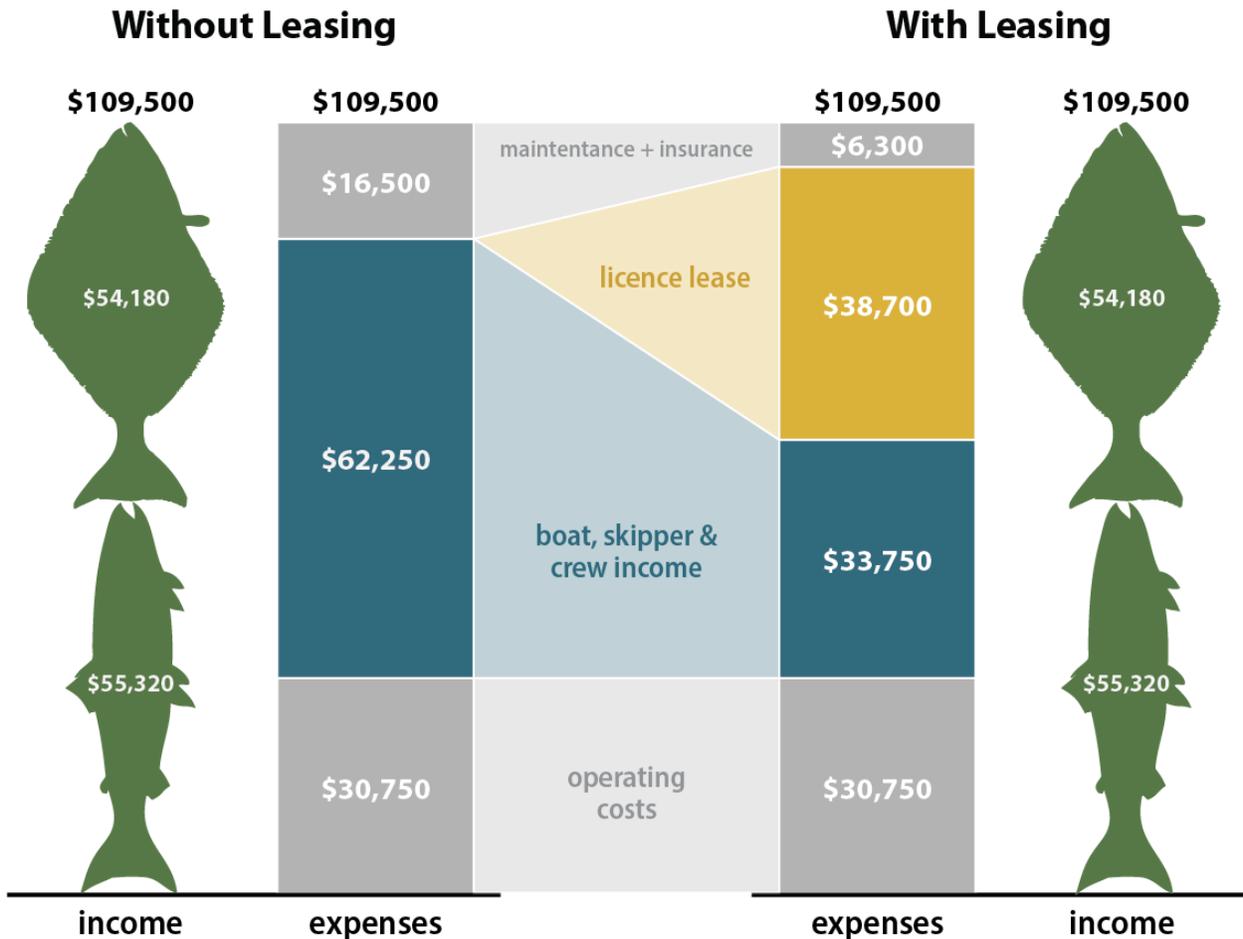
The left side of the graph shows the financial breakdown for a vessel fishing 60,000 lbs of halibut, the typical amount of quota caught by more profitable halibut vessels. The right side, using relatively conservative lease prices for today's market, shows what happens when a crew has to lease that quota rather than owning it outright. And these calculations are quite conservative – lease fees have already risen far above the 2012 prices used here. To purchase this 60,000 lbs block of halibut quota in today's market (2015) would cost \$4.5 million, an investment proposition several times larger than any vessel and gear combination currently in the industry.



In 2014, 90 west coast halibut vessels were more diversified, fishing one other licence in addition to halibut. These other licences come from a broad range of fisheries; salmon (42%) and groundfish (31%) are the two largest groups. More than 75% of the salmon troll licences are fished in Area F. Because Area F represents the largest fishery paired with halibut, we use it for the sample vessel below. It should be noted that Area F has participated in a pilot ITQ fishery since 2005. These calculations assume that the fisherman owns all of his salmon quota, and that no salmon leasing occurs.

LEFT / Distribution of non-halibut licence types held by halibut vessels with one other licence. Crab is fished by 4% of vessels; Schedule II by 1%.

Source: DFO Pacific Region Operations Branch, 2014.



As before, the left side of this graph shows the financial breakdown for a vessel fishing a typical amount of halibut quota. Combination halibut/salmon boats carry a median 7,740 lbs, earning \$54,180 in gross revenue from the fishery. In addition, the vessel catches 23,785 lbs of salmon on its Area F Troll licence, the average amount caught by fishery participants over the past 6 years.

The right side of the graph shows the financial impact of having to lease this halibut quota. While the impact is lessened by the buffering effect of the salmon income, there is still a significant reduction in crew share. And what would happen to the vessel's finances if the salmon fishery had a bad season? What if salmon fisheries were to fully transition to catch shares and the fisherman had to lease salmon quota as well?

Leasing places a major burden on crews and skippers, turning fishermen into sharecroppers on their own boats. And it can carry additional financial risk: many fish companies lease their quota to fishermen under the condition that the fishermen sell them any fish they catch – at prices set by the company. This turns fishermen into “price takers,” removing their ability to negotiate prices or take advantage of market spikes.

How important are these fish prices to a fisherman's viability? If a buyer drops the price they are willing to pay per pound by a mere penny, it can mean hundreds of dollars in lost revenue for a fisherman who is already on the edge of deficits for the season.

Catch shares claim to improve fishermen's finances by allowing them to take advantage of good timing, getting higher prices when they land fish in periods of high consumer demand. But any advantages are cancelled out by the stress of high lease prices, ever-thinning margins, and loss of agency around establishing relationships with buyers.



To some extent the pressures of weather and trying to get [all of your fishing] done on a certain date have been replaced by the pressures of carrying a big overhead of lease cost on the boat, so you're pressured to fish all the days you can fish in order to try and get ahead of that cost and actually make something for the boat and crew. It's a real balance for everybody.

I am trying to be unbiased about it and see where the advantages in quota are, but what's the worst anxiety, you know? A 30-knot westerly or a \$50,000 lease bill? What's going to make a guy make more sensible decisions?

CASE STUDY: REINING IN MARKET SPECULATION

Prud'homies, French Mediterranean Sea

Prud'homies is a system of governance that has managed fisheries on the French Mediterranean coast for more than 1,000 years. The Prud'homies are groups of 3 to 5 community-elected fishermen, each with more than 30 years' experience, tasked with overseeing the fishing activities of 1,650 artisanal fishermen in 33 communities. Today, under the direction of the Ministry of Fisheries, these groups regulate and sanction fishermen, negotiate with authorities, and resolve conflicts.⁸

The Prud'homies system plays a vital role in supporting small-scale fishermen and their communities, regulating who may fish and when. When issuing fishing licences, the groups give priority to small-scale fishermen; low-impact, artisanal fishing gear; and long-term fishery participants.⁹

This management scheme has brought the region long-term financial success by preventing overfishing and drops in fish prices due to market gluts. Prud'homies encourage fair distribution of profits and local employment. They also offer financial assistance to the community by lending money to youth, retired fishermen, widows, and other vulnerable sectors of society.¹⁰

The fishing community of Saint-Raphaël, for example, includes 350 skippers and 30 full-time fishermen harvesting more than 100 tons of fish annually using longliners, nets, and traps. Under the Prud'homies management system, the community's fishing value has increased 20% in the last 20 years.

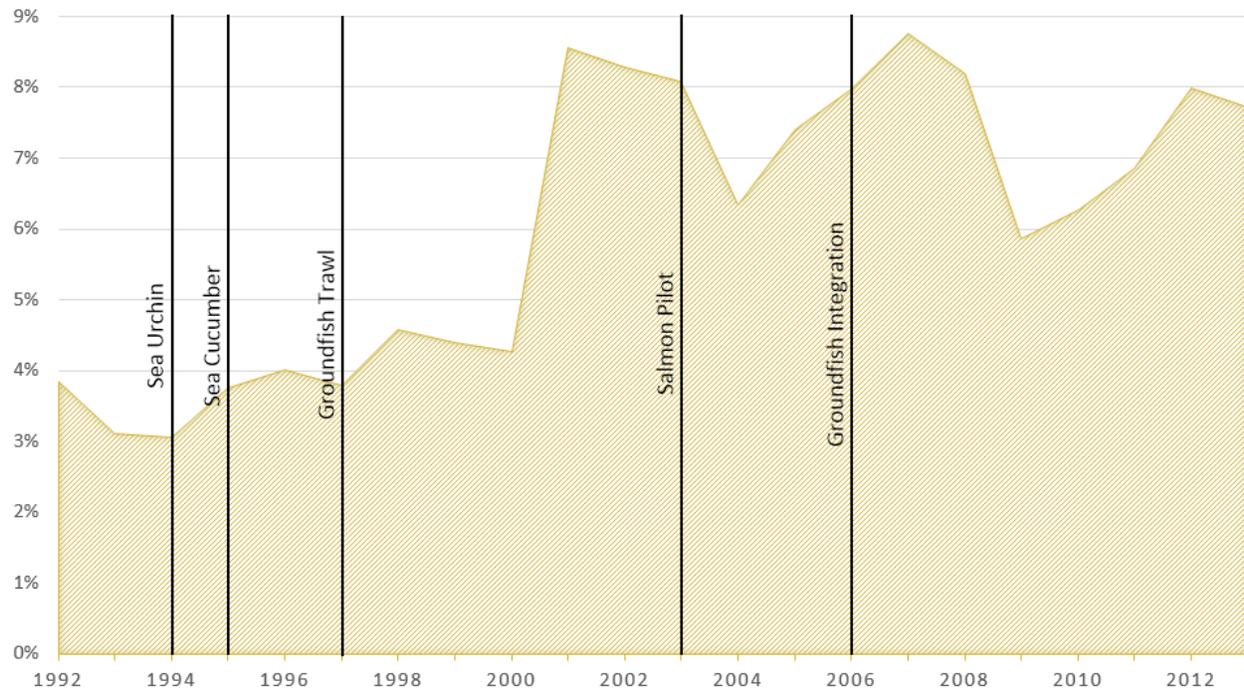
⁸ Frangouides, Katia, in Symes, David, and Jeremy Phillipson, eds. *Inshore fisheries management*. Vol. 2. Springer, 2001.

⁹ Mesmain, Michèle, and Elisabeth Tempier. "Prud'homies of the Mediterranean Presidia." *Slow Food*. <http://www.slowfood.com/slowfish/pagine/eng/blog/dettaglio.lasso?id_edit=661>.

¹⁰ Tempier, Elisabeth. "L'observation du littoral par les pêcheurs artisans." *Collectif Pêche & Développement* (2009).

SAFETY AT SEA

There are several less immediately visible but no less troubling consequences of the catch share system. As the cost of quota mounts, the industry has become less desirable to young people exploring their career options. This has resulted in crews that are less experienced in their trade, less familiar with their vessel or gear, and more prone to leaving a vessel short-handed mid-season as they go in search of better pay. High quota costs have also led to skippers spending less money on insurance, training, vessel maintenance, and gear. It is no small wonder that the incidence of injuries and fatalities at sea has more than doubled in the last 20 years.



Catch shares are frequently touted for their contributions to safety because they prevent the “race for fish” that can send desperate crews into bad weather, hoping to catch fish before a fishery closes. In a dangerous twist, however, catch shares are now causing poorly maintained vessels to venture out into rough conditions to take advantage of fleeting spikes in market prices. Higher market prices also mean more money for fish buyers, who have been known to pressure contracted crews into basing their decisions on profit, not prudence.

ABOVE / Number of approved fishing industry claims (both disability and fatality) made to WorkSafeBC per licensed fisherman, 1992-2013. Black lines indicate dates of ITQ implementation.

Source: WorkSafeBC 1996-2014 annual statistical reports, DFO Statistics.

The shrinking fleet size has had other unforeseen consequences for safety at sea as well:

It's quite rare to see another boat out there now, whereas we would have been probably in sight of 2 or 3 [boats] even 10 or 15 years ago. And that's a real point; it's really reduced the vessels that can help each other, which is where most of the aid for fishermen comes from. The Coast Guard comes in extreme cases but most of it's handled within the fishing fleet when a guy needs help.

It is important to remember that these are not just numbers and statistics on a page; these are real people out on the water, truly sacrificing their blood, sweat, tears – and sometimes even lives.



One thing about commercial fishing or being on the water ever, whether it's a 6-foot skiff or a thousand-foot boat, the ocean can take that without warning, and that means any person that's on them boats does not come home. And as a commercial fisherman, when I untie my boat to go fishing, I untie my boat to go fishing to come home.

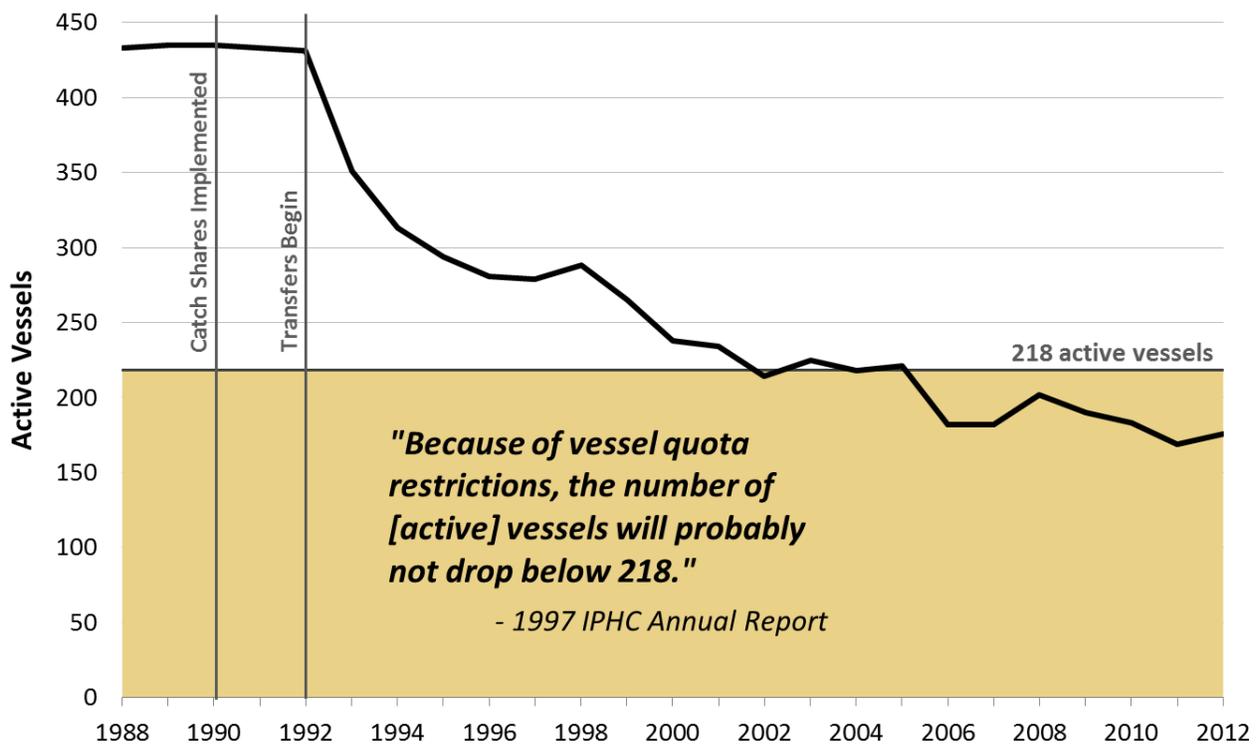
SHRINKING FLEETS, SHUTTERED COMMUNITIES

As the fishing industry becomes less profitable, more complicated, and increasingly associated with personal and financial hardships, fewer small vessels and owner/operator enterprises have stayed in the game. Similarly, new recruitment into the industry has been seriously curtailed.



There was a stepping stone system that worked. And that small boat fishery was fundamental because it was the training ground for anybody that went forward to run the bigger, more complex boats. And there's no substitute for that.

BC's halibut fishery is a dramatic example of a catch share-driven decline. Though some fleet reduction is to be expected when catch shares are implemented, even fishery managers were unable to anticipate the halibut fishery's continued drop. Since quota transfers began, the halibut fishery has experienced a precipitous decline in vessel participation – a pattern borne out in other catch share fisheries as well.



ABOVE / Active halibut vessels before and after catch share implementation, 1988-2012. Quota transfers were not allowed until the close of the 1992 season.

Sources: International Pacific Halibut Commission (1988-2012) Annual Reports; Nelson Bros Fisheries Ltd (2013 & 2006) Analysis of Commercial Fishing Licence, Quota, and Vessel Values.



In our village you can really see it. When quotas came in, especially the halibut, it just decimated – the quality of the boats just went downhill. And guys just passed off their quotas to the next guy, and then all of a sudden there's nobody at home with a quota. And all their boats and everything just die in the village. They bring their boats to the next bay and just let them dry up and disappear.

As fishermen retire or move out of the industry, they often sell their vessels, licences, and quota. While some of these licences and quota have been bought back by DFO for redistribution to First Nations, many others have been sold to the highest bidder. As a result, those with greater access to capital have begun to accumulate licences and quota, fueling a steady trend toward consolidation.

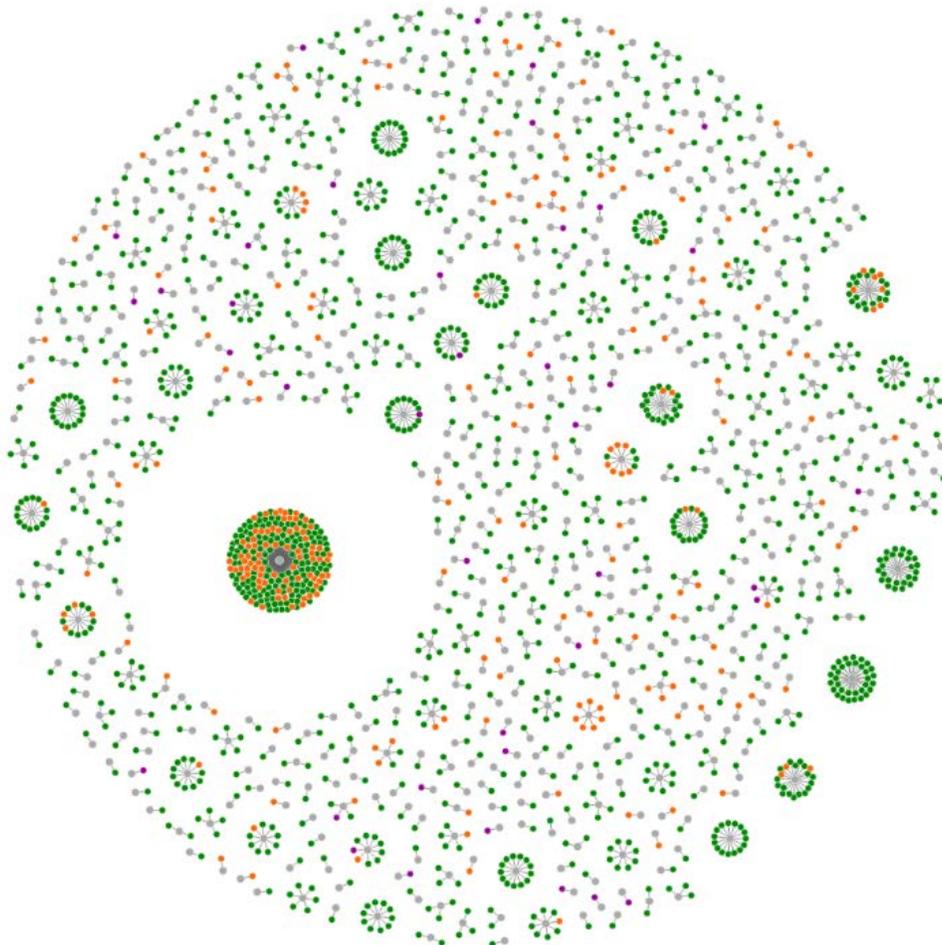
INTERACTIVE /

View an interactive version of this graph at: <http://data.ecotrust.ca/itq>



The big quotas were awarded to those who had participated longest, and in some ways it's hard to really fault that because they did participate. The only thing was there was no consideration or no apparatus in place to deal much with those quotas when those people tire and retire. They've got to be bought by some other businesses and it's the nature of money and capital that you know where they're going to go.

A young guy scraping together every last dollar to try and keep a boat running is not going to compete with a guy that owns three or four draggers and is buying quota just for insurance, whether he needs it or not. That's the situation you put young guys in with a quota system that's transferable.

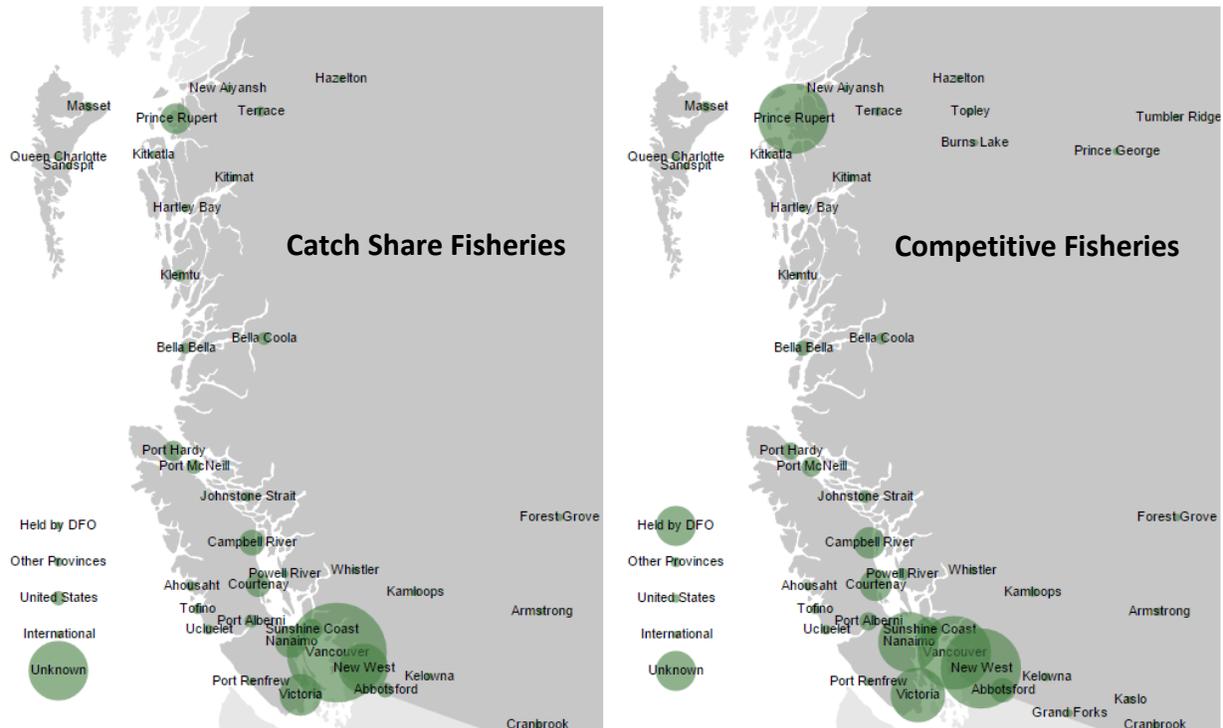


ABOVE / Herring fishery consolidation. Gray dots represent licence owners, while coloured dots are types of herring licences: roe herring by gillnet (green) and by seine (orange), plus spawn on kelp (purple). Clusters show where a single owner holds multiple licences. The largest cluster represents the 226 licences owned by Jim Pattison Enterprises and subsidiaries.

Source: DFO Pacific Region Operations Branch.

Commercial fishing has supported BC's coastal communities for thousands of years, but the structure of the industry has been radically altered by the introduction of catch shares.

Consolidation of fisheries access removes a community's ability to benefit from the resources on its front doorstep, redistributing that income to the hands of corporations, processors, armchair fishermen, and urban centers. Particularly in ITQ fisheries, the ownership of licences and quotas has shifted from coastal communities to urban centres.



Fishermen increasingly find themselves fishing more and more for less and less. In the role of leaser, they are not even guaranteed a living wage. They bring less wealth into their communities and fish year to year with no income stability, no ability to plan for the future, and no promise of earnings from the sale of their enterprise when their fishing days are done.

Consolidation of fishing access is done in the name of economic efficiency. From a company's perspective, it makes better financial sense to load larger amounts of quota onto fewer larger vessels. These vessels then deliver their fish to larger ports with company processors, skipping over the smaller community ports. As the market moves away, smaller communities invest less in docks, services, and other infrastructure.

ABOVE / Locations of licence ownership in 2014. The diagram at left shows where catch share-managed licences are owned, while the map at right shows where competitive fishery licences are owned. Metropolitan areas have been aggregated to clarify locations.

Source: DFO Pacific Region Operations Branch.

INTERACTIVE /

View an interactive version of this graph at: <http://data.ecotrust.ca/itq>



A lot of the infrastructure's gone for us in Prince Rupert now. We've lost boat shops, we've lost mending shops, we've lost stores that sell all the stuff for us. That's a challenge now too. If we keep on depleting our infrastructure, fishermen aren't going to be able to keep on going.

Coastal communities used to benefit from their adjacent marine resources. Today just about every fishing community on the coast is experiencing declining populations, increased unemployment rates, social instability, and shuttered local businesses.



When it comes to the ownership [of licences and quota], we have had it stolen from these communities, from the individuals that live in these communities and it's going to continue to be stolen in the name of consolidation.

This loss of local industry hits rural coastal communities hard. According to BC Stats, every thousand dollars of local fishing expenditure generates \$1,490 of local income, a \$550 increase in local GDP, and \$130 in government tax revenues. For every million dollars spent in a community, 3.69 local jobs are created.

CASE STUDY: THE BENEFITS OF CO-MANAGEMENT

Fisheries Co-management in Galicia, Northwest Spain

The Galicia region of Spain has a long history of artisanal fishing; more than 25,000 families depend on fishing income from a fleet of 40,000 small boats. Small-scale fisheries in this area are multi-gear and multi-species, with high fish sale prices.¹¹ In 2012, the fleet caught 175,000 tons of fish, with a market value over \$440 million USD.¹²

In the early 2000s, however, artisanal fisheries in Galicia struggled with overfishing, pirate fishing, and the effects of the 2002 *Prestige* oil spill.

In 2003, the town of Lira led the establishment of a marine protected area under the governance of the local *cofradía*, or brotherhood – an organization of fishermen’s representatives with legal jurisdiction. The *cofradía* also involved local and national NGOs, academia, and regional government in a deliberative process culminating in the creation of Reserva Marina de Interés Pesquero Os Miñarzos (Miñarzos Marine Fishing Reserve) in 2007.¹³

Fishermen have seen a number of benefits, including:

- Control of illegal fishing
- Improved compliance
- Improvement in productivity of some fisheries such as goose barnacle
- Maintenance of fishing activity in small local ports and associated businesses
- Increased recognition of the fishermen
- Decreased conflicts
- Increased environmental stewardship
- Collaboration in collecting data for the management of the reserve

The initiative has generated a domino effect, encouraging other towns’ *cofradías* and communities to follow suit and push for the creation of more co-managed protected areas. In 2009, another reserve was established in Ría de Cederia. Six more *cofradías* are now actively involved in the process of creating networks of marine protected areas along their coasts.¹⁴

¹¹ García Allut, Antonio, et al. “Methodology for integration of fisher's ecological knowledge in fisheries biology and management using knowledge representation (artificial intelligence).” *Putting Fishers’ Knowledge to Work: Conference Proceedings* (2003), p. 227-237.

¹² Macho, Gonzalo, et al. “The key role of the Barefoot Fisheries Advisors in the co-managed TURF System of Galicia (NW Spain).” *Ambio* 42.8 (2013), p. 1057-1069.

¹³ Perez de Oliveira, Lucia, “Fishers as advocates of marine protected areas: A case study from Galicia (NW Spain).” *Marine Policy* (September 2013), p. 95-102.

¹⁴ García Allut, Antonio, Ana Jesus, “Becoming proactive agents.” *Samudra Report No. 53* (July 2009), p. 15-18.

THE FUTURE OF COMMERCIAL FISHERIES IN BC

The growth of catch share management systems has contributed both directly and indirectly to the decline in commercial fishing activity on the BC coast. The introduction of access rights was intended to support independent fishermen. Instead, it has consolidated access away from fishermen, led to new quota costs, increased financial risk for small boat fleets, and given rise to armchair leasing by wealthy individuals, seafood processors, and retailers.

BC's commercial fisheries land more than \$300 million annually.¹⁵ How might we manage and monitor this industry to get a different set of results – jobs, viable coastal seafood industries, resilient communities, and a new generation of fishermen producing our food? And should we have basic social objectives when we impose private property rights on a public resource?

CONTROL OF THE COMMONS

Wild marine fish are public resources managed by DFO on Canadians' behalf, yet catch shares represent a form of private property rights. How then does the Canadian legal system manage the dual claims to private and public goods? And how does this legal definition play out in the real world?

MORE INFORMATION /
Read the complete legal analyses in Appendices 1 and 2.

Canadian courts consider fishing licences to be a fisherman's private property when evaluating assets¹⁶ and when the licences are bought and sold, but the Minister of Fisheries and Oceans still has final say over their use – he or she may change or revoke them at any time.^{17,18}

The Minister gives and the Minister... can take away.

- *Saulnier v Royal Bank*¹⁹

For example, if the Minister restricts or closes a fishery, fishermen have no choice but to comply without compensation for their loss of access.²⁰

¹⁵ BC Ministry of Agriculture. "British Columbia Seafood Industry 2013 Year in Review." *Province of British Columbia*, 2013.

¹⁶ 2008 SCC 58 (*Saulnier*).

¹⁷ *Saulnier*, supra note 1 at para 42, para 50.

¹⁸ Brad Caldwell, "Amendments to *Personal Property Security Act* Take Effect 1 September 2012: Banks Permitted to take Security over Fishing Licences." *Mariner Life Magazine* (July 2012), online: Admiralty Law. <<http://www.admiraltylaw.com/fisheries/Papers/PPSAAmendments.pdf>>.

¹⁹ *Supra* note 1 at para 48.

²⁰ 2011 FCA 291 (*Kimoto*).

Similarly, owning quota does not mean that you own the fish in the water.²¹ Instead, quota gives you the right to harvest from the public resource.²² This means that, like competitive fishery licences, fishermen have no claim to compensation for loss of access²³ – even if the Minister previously promised it.²⁴

This policy is intended to give fishermen incentive to protect fish stocks as a way of protecting future revenue streams,²⁵ but it also brings serious implications, aptly described in *Malcolm v Canada*:

Commercial fishermen depend on the stability of the industry in order to make informed investment and business decisions. Many have incurred substantial debt, confident that they will have access to a steady allocation of the TAC. Without a doubt, reducing their portion of the TAC without a market based method of compensation will negatively impact the livelihood of many commercial fishermen.²⁶

While this lack of compensation may reassure some that the fisheries are not being privatized, commercial fishermen are left to bear the negative impacts of management decisions.

Still, the private ownership of access to fish raises a question of permanence. What if DFO wanted to someday move away from catch shares? Losing *some* fishery access does not require compensation, but what if catch shares no longer granted any access at all? If the Minister were to revoke all quota rights, would fishermen be able to pursue a legal review?

According to *Malcolm v Canada*, the Minister's decisions are judged by three flexible criteria:²⁷

1. Was the decision made in bad faith?
2. In making the decision, did the Minister disregard the *Fisheries Act's* purpose?
3. Is the policy unjust? Was it irrational, incomprehensible, or otherwise the result of an abuse of power?²⁸

As long as the Minister makes management decisions – quota or otherwise – in the public interest and does not act against these three considerations, fishermen have no claim to a legal review.

The Minister's discretion to manage the fishery is... subject to the over-arching responsibility to preserve the resource. The Minister is obliged to ensure that

²¹ 2014 FCA 130 (*Malcolm*).

²² Christine Stewart, *Legislating for Property Rights in Fisheries*, (Rome: Food and Agriculture Organization of the United Nations, 2004) at 13.

²³ *Malcolm*, at para 43, citing *Canada (AG) v Arsenault*, 2009 FCA 300 at para 57.

²⁴ *Ibid* at para 46.

²⁵ *Ibid* at 5; see also Le Gallic, *Using Market Mechanisms to Manage Fisheries: smoothing the path* (Paris: OECD, 2010).

²⁶ *Malcolm v Canada (Fisheries and Oceans)*, 2013 FC 363 at para 68 (*Malcolm*).

²⁷ *Supra* note 27 at para 31.

²⁸ *Malcolm*, *Supra* note 27 at para 35. The Court relied on a *Maple Lodge Farms v Canada* [1982] 2 SCR 2 and *Dunsmuir v. New Brunswick*, 2008 SCC 9 to determine the circumstances when a discretionary policy decision is reviewable and by what standard the decision is to be reviewed.

Canada remains within the TAC and to take effective enforcement measures to ensure that limits are respected. ...**It is irrelevant who catches the fish**; what is important is that the TAC is respected²⁹ (emphasis added).

- *Malcolm v Canada*

The Minister of Fisheries and Oceans is constantly under competing political pressures. If the composition of the fleet and its socioeconomic impacts have been deemed “irrelevant,” there is real concern that small-scale commercial fishermen with few resources will not be heard as the recreational and large-scale commercial sectors pressure the Minister to adopt policies that favour their own profit margins.

Through these and other court decisions, the legal control of the commons has been squarely laid under the Minister’s direction. In practice, however, the rights of commercial licences and quotas are not so clear-cut – they are less than full ownership, but more than mere privileges.³⁰

“ The concern is that that fish is basically now an owned component of that corporation, so it will be used – like the fishery will be kind of recreated according to the needs of that corporation.

By imposing few restrictions on quota holdings and sales, DFO has given these quotas quasi-property rights: property in practice, but with no legal standing. Unconstrained transferability, perpetual holdings, and political pressures have all turned catch shares into *de facto* property under DFO’s free market management regime.

Quotas grant exclusive harvest and transfer rights to their holders. Buying, selling, or leasing quota transfers the right to profit from a previously common resource.³¹ This effectively turns the quota into “paper fish, a hypothetical but [highly] valuable commodity.”³²

Section 7(2) of the *Fisheries Act* sets a nine-year limit on any commercial licence issued by the Minister, but nowhere in the *Act* or its regulations does it state how long quota is issued for. Thus, quota is essentially granted in perpetuity to those who were involved in the particular fishery at the time it moved to a catch share management system. This windfall for first-generation quota holders is granted at the expense of new entrants and future generations, who face prohibitively expensive quota lease or purchase costs.³³

Catch shares in BC are particularly problematic because of DFO’s failure to implement an industry or fishery-wide quota policy. As a result, commercial fisheries are operating in a grey area of ownership.

²⁹ *Ibid* at para 75.

³⁰ Adam Soliman, *Individual Transferable Quotas in World Fisheries: Addressing Legal and Rights-based Issues*, (2014) *Ocean and Coastal Management* 87, 102 – 113, at p 108.

³¹ Stewart at p 13.

³² Caroline F. Butler, *Paper Fish: The Transformation of the Salmon Fisheries of British Columbia*, (2008) *American Fisheries Society Symposium* 68, at p 2.

³³ Evelyn Pinkerton & Danielle N. Edwards, *Ignoring market failure in quota leasing?*, (2010) *Marine Policy* 34, 1110-1114.

While the Minister has the right to withdraw or reallocate quota without compensation,³⁴ the practices of automatic licence renewals, licence and quota transferability, and perpetual quota rights – all hallmark qualities of personal property – have nonetheless given fishermen and speculative investors a sense of ownership.³⁵

So what if DFO were to one day reverse course and move the fishery away from a catch share management system? According to the law, those who have invested in increasingly expensive quotas would have no right to compensation. DFO has operated voluntary licence buyback programs in the past, but these programs have been inconsistent and largely politically motivated. And with the huge amount of capital already invested in fisheries quotas, a quota buyback program would also be financially impossible with DFO's current funding.

Consequently, small-scale commercial fishers and coastal communities are not only being squeezed out of the industry by loss of access, they are also losing their political ability to slow or reverse the process.

³⁴ See *Malcolm v Canada (Minister of Fisheries and Oceans)*, 2014 FCA 130, aff'd 2014 CanLII 68699 (SCC).

³⁵ See *Doug Kimoto v Canada (AG)*, 2011 FCA 291 at para 12 where the plaintiff argued that the SCC's *Saulnier v Royal Bank of Canada*, 2008 SCC 58 decision bestowed quota holders with proprietary rights and there a right to compensation for expropriation. Both levels of court rejected this argument.

CASE STUDY: MAINTAINING ACCESS FOR SMALL-SCALE FISHERMEN

Pacific Coast Fishermen's Conservation Company, British Columbia, Canada

When BC's commercial groundfish fleet voted for ITQ management, they recognized that the impact on the small boat fleet would be huge. Suddenly every fish caught – both target species and incidental bycatch – would require a quota 'tag'. These quota tags would have to be purchased in advance of each fishing trip at the going market price with no guarantee that the fish would be caught or that the market price would hold. Fishermen were forced to gamble – 'How much quota will I need? For which species? Will my selling price pay for the quota?'

Though the rules were the same for large, well-established vessels, the risk of ITQs was offset by the scale of revenue earned on each fishing trip. For smaller vessels already pushed to the edge of economic viability, however, the added requirement to purchase and hold quota on board was a serious concern.

Together with Ecotrust Canada, seven small boat fishermen went looking for a solution. After considerable research, they set their sights on creating a licence and quota bank – the Pacific Coast Fishermen's Conservation Company (PCFCC). The bank would purchase licenses and quota when prices were good, and then lease to member fishermen at fair market prices as fish were caught and quota needs confirmed. This system reduced the gambling factor considerably and removed the need for advance quota purchases – a major benefit in cash-strapped fisheries.

A conservation covenant held by Ecotrust Canada ensures that the fishermen using the bank's quota are fishing to an agreed environmental standard. A Board of fisherman-members manages the affairs of the Company and decisions for new purchases and leases are made collectively by the group.

Since its inception in 2007, PCFCC has more than proven its ability to support the small boat fleet. The fishermen who participate have remained economically viable where many of their peers have failed, and the assets in the bank have slowly but steadily grown over time.

Most ITQ systems around the world end up corporatizing and consolidating ownership and catching capacity onto larger vessels. PCFCC is a viable, alternative economic model that protects small boat fishermen – living by the rules of BC's ITQ regime but fostering a different set of results.

COULD SALMON BE NEXT?

DFO has been exploring the idea of instituting an ITQ management system in BC's salmon fisheries since 2003. To test the system's viability, DFO introduced a pilot ITQ program in the troll fishery in 2005 and seine fishery in 2006. Because salmon is the most culturally important fish species on the west coast, changing access to this fishery would have major implications for individuals and communities. With complex ecological and cultural barriers to overcome, the proposal has met with strong resistance from active fishermen.

MORE INFORMATION /

Read more about the history of salmon management and catch shares in Appendix 3.

The salmon fishery is unique in that its runs and harvests are notoriously unpredictable. DFO issues pre-season estimates, which are then revised on the basis of in-season population sampling and modeling. These revisions can extend the season for additional fishing or abruptly close the fishery.

While larger harvests are welcome news for fishermen, they would pose a problem under an ITQ system: individuals would find it difficult to quickly acquire new quota, especially in a highly competitive market. On the other hand, a significantly smaller harvest would ruin many harvesters, particularly if they had to make large investments to purchase quota so they could participate, only to discover they could no longer access that amount of fish.



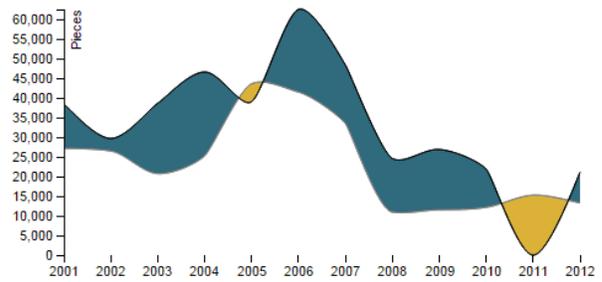
I really don't like quotas. I would rather that the salmon fishery stay away from quotas because we just lose everything. It gets rid of the small boat operators.

Catch shares require a degree of certainty surrounding annual harvests; fishermen only have a chance of financial success when they have some guarantee that they can realize the value of their investment. Based on the large differences between pre-season estimates and in-season adjustments, BC's salmon fisheries appear to be too unpredictable for an effective, equitable catch share system to be implemented – the statistics suggest that it is doomed to failure before it starts.

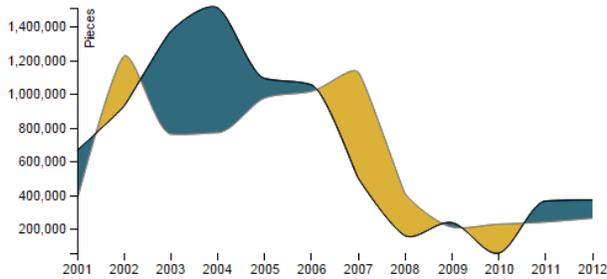
BELOW / Pre-season estimates vs. in-season TAC adjustments for salmon gillnet fisheries, 2001-2012. Yellow areas indicate where TACs were adjusted below pre-season estimates once the season was already underway; blue shows where TACs were adjusted higher than initial estimates.

Source: DFO data request and DFO post-season statistics.

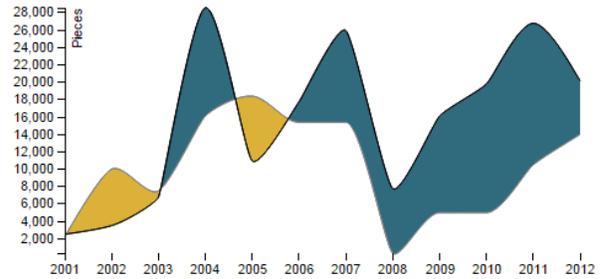
Chinook



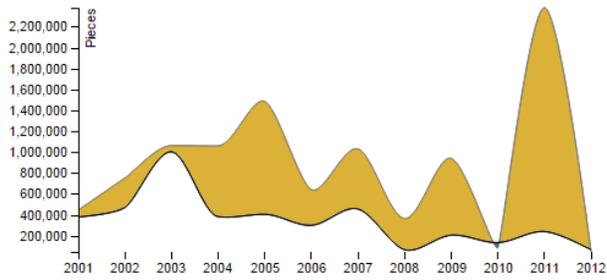
Chum



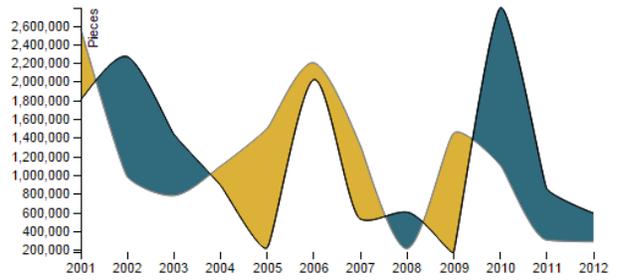
Coho



Pink



Sockeye



INTERACTIVE /

View an interactive version of this graph at:

<http://data.ecotrust.ca/itg>

HOPE ON THE HORIZON

There is a great divide between those who believe that fishing is a sunset industry and those who see a sunrise. Just as BC's marine productivity experiences cycles, so too does its fisheries. Despite the apparently gloomy outlook for BC's commercial fisheries, there remains a great deal of hope among fishermen and fishing communities – and rightfully so.

Fishing is one of BC's most environmentally sustainable resource-based industries.

Although populations may fluctuate from year to year, the vast majority of BC's fish stocks are both abundant and resilient. In 2013, BC fishermen caught nearly 100 species of marine plants and animals from some of the most pristine waters in the world.³⁶



The government has been spending my tax money to publish what a sunset industry fishing is. It's a bunch of horse shit. It is one of the few sustainable things we have. They should be publishing stuff to generate optimism. Because after a record of severe mistakes, intensive fishing in the '50s, '60s and '70s, 90% of the salmon runs are fine. So if it can't be damaged by the kind of bungling we've already had, then there is a huge potential and it should be run as a business for the country.

There is high demand for seafood.

Half-joking, one of our interviewees pointed out, "In my 58 years of living, I can assure you I've never seen food go out of style. A lot of things come and go, but one thing humans never stop doing is eating." BC's wild fisheries help to answer that need, consistently catching hundreds of millions of meals' worth of fish each year.³⁷



There's huge market potential in getting this stuff in front of the people – it's a real good, healthy, clean food source.

Fishing supports regional food security.

Remote areas don't always have access to affordable fresh food. Fishing can ensure that rural communities have access to locally-produced food sources.



We are not managing fisheries here with ITQs, we are managing people. We are managing the amount of food that goes on somebody else's table.

Commercial fishing is vital to economies and cultures in coastal communities.

Commercial fishing is a cornerstone of local economies and supports a strong web of other intangible, cultural values.³⁸ It represents a key opportunity for small coastal communities to generate wealth and wellbeing on many levels.

³⁶ BC Ministry of Agriculture. "British Columbia Seafood Industry 2013 Year in Review." *Province of British Columbia*, 2013.

³⁷ Ibid.

³⁸ O'Donnell, Kerrie, et al. "Understanding Values in Canada's North Pacific." *Ecotrust Canada*, 2013.

We are at a key decision point for BC's fisheries. Good policy process and implementation can have measurable economic, social, and environmental benefits for fish stocks, fishermen, and communities. Conversely, policy development that ignores social consequences can be devastating and cause largely irreversible damage. Broadly implementing catch shares without simultaneously developing the controls needed to avoid the negative results presented here only pushes Canada farther from its stated commitment to improve performance on biological, social, and economic outcomes.

When asked what they would say to The Honourable Gail Shea, Minister of Fisheries and Oceans, our interviewees implored her to listen:

“ I would ask her to come and talk to the people who are the silent professionals or experts at drawing wealth from this industry, and not [allow] the lobby sector to have the decision. They're so far into the decision-making for such acute reasons, where guys like me – I am 58 years old, I want fish for everybody forever, but yet continually I'm muted. I need to have the Minister come and walk in my shoes.

“ We need attitude help in Ottawa. We need the whole thing re-thought so that they are thinking about – “we are conservatives, we are a business government” – how can we actually spread the benefit of the fishery? Because in government, your business isn't making a few people rich, your business is to make the country rich.

IN SUMMARY

The T. Buck Suzuki Environmental Foundation and Ecotrust Canada began this project in 2014. Throughout our work in BC's coastal communities, we had seen the consequences of an industry increasingly disconnected from community. We wanted to understand some of the dynamics at play and find places for positive intervention.

What we learned is that the commercial fishery has experienced a fundamental restructuring – not just a simple reduction in size and strength. Access to local resources is moving into fewer and fewer hands. Attempts to make fisheries safer, more cost-effective, and more secure for fishermen have not, by all accounts, achieved their goals.

The lack of clear social objectives at the introduction of catch shares stood out in our analyses, partly because there is some question over the root cause of this restructuring initiative. Is it, as we believe, the result of a series of policy interventions over decades aimed at economic rationalization of the industry? Or is it, as many proponents argue, simply a fisheries management tool with conservation and fair market pricing objectives?

Regardless of political alignment, our research has shown that catch shares without clear social objectives, and specifically BC's ITQ system, have had deleterious effects across the board. The system has made fishing more expensive, more complicated, and less safe. It has resulted in higher unemployment both in the industry and in broader economies, made ex-fishermen wealthier than active fishermen, reduced the number of new entrants into this sector, and limited the financial viability of future generations of fishermen. We would argue that catch shares have essentially privatized a public resource and radically reduced the ability of smaller vessels and communities to benefit from the industry.

Catch shares replaced the "race for fish" that everyone recognized as problematic with a system that locks up access and wealth. Do fishermen matter anymore?

Our hope is that the data compiled and analyzed by our team will spark interest and debate. We hope others will look into our findings and prove us wrong. Unfortunately, we don't think so – not only because we work in fisheries, but because we also work in other resource sectors where these patterns of ownership, access rights, and wealth concentration are remarkably similar.

We must ask ourselves how commercial fishing's \$300 million in annual landed value should be distributed. Will there be a thriving small boat fleet or will we settle for a few massive vessels? What place will fishermen and coastal communities hold in BC's future? Does this catch share system represent the direction we want for our natural resource policies in Canada?

APPENDIX 1: PROPERTY RIGHTS IN CANADIAN FISHERIES

KEGAN PEPPER-SMITH, UBC FACULTY OF LAW

INTRODUCTION

The purpose of this legal note is to provide Ecotrust Canada and the T. Buck Suzuki Foundation with an update on the property rights associated with licences and individual transferable quotas in Canada's commercial fisheries. More specifically, the following issues were identified as requiring further clarification:

1. What were the legal implications of the *Saulnier v Royal Bank* decision?
2. Have there been developments in the proprietary status of licences and quotas since the *Saulnier* decision?
3. Has the introduction of ITQs moved Canada's fisheries towards greater privatization?

I thought it would be best to organize my findings into two sections. The first section addresses the scope of applicability of the *Saulnier v Royal Bank*³⁹ decision and the status of property rights for ITQs. The second section outlines the Minister of Fisheries and Oceans ("Minister") discretion in regards to licence and quota management.

SECTION I

Saulnier was a significant decision because it provided legal support from Canada's highest court for the claim that commercial licences are property. However, as was stated in that decision, and as was made clear in subsequent jurisprudence, this proprietary status for licences is very limited and is not extended to quota holdings. This means that fishermen operating within a quota system are afforded very limited legal protection of their quota. The Minister has absolute discretion in quota management and fishermen have no legal right to compensation for quota appropriation.

SECTION II

The management of licences is constrained by sections 7 and 9 of the *Fisheries Act*. The management of quotas, on the other hand, is not subject to any statutory constraints. Accordingly, there are very limited circumstances when a quota policy adopted by the Minister is vulnerable to review by the courts. The only two legal constraints on the Minister are: (1) the decision must be reasonable – it must not be made in bad faith, be based on irrelevant or extraneous considerations, or offend the principles of natural justice; (2) the decision must be consistent with the Minister's duty to manage the fisheries on behalf of the public.

³⁹ 2008 SCC 58 (*Saulnier*).

SECTION I

REVIEW OF WHAT WAS HELD IN *SAULNIER V ROYAL BANK*

Before I get to the distinction between quotas and licences in terms of proprietary status, I thought it would be best to start by summarizing the *Saulnier* decision and reviewing its applicability to commercial fishers in B.C.

The issue in *Saulnier* was whether the Appellant's four commercial fishing licences constituted "property" as defined in the *Bankruptcy and Insolvency Act*⁴⁰ and "personal property" as defined in Nova Scotia's *Personal Property Security Act*⁴¹ so as to pass to the bank on Mr. Saulnier's assignment in bankruptcy. The Appellant argued that the licences were merely privileges to do that which would otherwise be illegal and therefore did not constitute property. The Supreme Court of Canada unanimously rejected this position.

The Court found the definition of "property" in the *BIA* to be purposively broad, intending "to sweep up a variety of assets of the bankrupt not normally considered 'property' at common law."⁴² The definition of property in the *BIA* includes "any type of property . . . and profit . . . arising out of or incident to property".⁴³ Given this encompassing purpose and definition, the Court found that "a licence to participate in the fishery coupled with a proprietary interest in the fish caught" elevated the commercial licence to property for the purposes of the *BIA*.⁴⁴

For the *PPSA*, the Court found that the purpose of it was to "enable holders of personal property to use it as collateral, and to enable lenders to predict accurately the priority of their claims against the assets in question."⁴⁵ And the Court ultimately held that with this purpose in mind, and the broad definition of personal property, which included "intangible personal property", was enough to include a commercial licence as personal property.⁴⁶

IMPLICATIONS OF THE *SAULNIER* DECISION

The post-*Saulnier* commentary was primarily focused on the commercial benefit resulting from the decision.⁴⁷ By recognizing licences as property under these statutes it was understood that the availability of business and personal loans for commercial fishermen would increase. However, because the *PPSA* is a provincial statute it is also worth inquiring whether licences are considered personal property under British Columbia's equivalent statute.

Prior to 2011, B.C.'s *Personal Property Security Act*⁴⁸ applied to a very limited set of licences – only licences to harvest timber and Christmas trees were covered. In 2011, the B.C. legislature passed the

⁴⁰ RSC 1985, c B-3 (*BIA*).

⁴¹ SNS 1995-96, c 13 (*PPSA*).

⁴² *Saulnier*, supra note 1 at para 44.

⁴³ *BIA*, supra note 2 at s. 2.

⁴⁴ *Saulnier*, supra note 1 at para 42.

⁴⁵ *ibid* at para 19.

⁴⁶ *ibid* at para 50.

⁴⁷ See Julian Ho, "Saulnier v RBC: a big catch for the fishing industry?" (28 October 2008), online: The Court, <<http://www.thecourt.ca>>; Shane B. Perlman & Nabil Dhirani, "Rights of Trustees in Bankruptcy and Secured Creditors to Licenses Held by a Debtor" *Borden Ladner Gervais* (21 April 2009), online: Mondaq <<http://mondaq.com>>.

⁴⁸ RSBC 1996, c 359 (*PPSA*).

Personal Property Security Amendment Act, which expanded the definition of licence in the *PPSA* to the following:

"licence" means a right, whether or not exclusive, that may be transferred by the holder with or without restriction or the consent of the grantor and that entitles the holder to do any of the following:
(a) manufacture, produce, sell, transport, grow, harvest or otherwise deal with personal property;
...
(c) acquire personal property⁴⁹

This amendment came into force in 2012 and it is understood that B.C.'s *PPSA* now covers commercial fishing licences.⁵⁰

LIMITS ON THE PROPRIETARY STATUS OF LICENCES

It is important to note that while Justice Binnie, who wrote the unanimous decision in *Saulnier*, analogized a commercial fishing licence with a common law profit a prendre, he was also careful not to extend the proprietary status of a licence beyond that vested through the *Fisheries Act*.⁵¹ Justice Binnie stated:

The analogy used for present purposes does not prevail over the legislation. The licence is no more and no less than is described in the relevant legislation.⁵²

...

The bankrupt can transfer no greater rights than he possesses. The trustee simply steps into the shoes of the appellant *Saulnier* and takes the licence "warts and all."⁵³

These statements should alleviate the concern that a bank obtains greater legal rights than the fisherman when a licence is obtained through an assignment in bankruptcy. The bank remains subject to all of the conditions attached to the licence, including the minister's "absolute discretion" in licence renewal and quota management.

PRIVATIZATION OF A PUBLIC GOOD UNDER AN INDIVIDUAL TRANSFERABLE QUOTA (ITQ) SYSTEM

Many of the cases reviewed quoted the following statement from the Supreme Court of Canada's *Comeau's Sea Foods v Canada*⁵⁴ decision:

Canada's fisheries are a "common property resource", belonging to all the people of Canada. Under the *Fisheries Act*, it is the Minister's duty to manage, conserve and develop the fishery on behalf of Canadians in the public interest.⁵⁵

⁴⁹ *ibid* at s.1.

⁵⁰ Brad Caldwell, "Amendments to *Personal Property Security Act* Take Effect 1 September 2012: Banks Permitted to take Security over Fishing Licences." *Mariner Life Magazine* (July 2012), online: Admiralty Law. <<http://www.admiraltylaw.com/fisheries/Papers/PPSAAmendments.pdf>>.

⁵¹ RSBC 1996, c 149.

⁵² *Supra* note 1 at para 35.

⁵³ *ibid* at para 50.

⁵⁴ [1997] 1 SCR 12 [*Comeau's Sea Foods*].

⁵⁵ *ibid* at 25-26.

There is a belief that the Minister's ability to fulfill this duty is significantly fettered under an ITQ regime. A concern of opponents to ITQ systems is the ostensible assignment of property rights in the fisheries (privatization), which renders the Minister's ability to manage it on behalf of Canadians severely constrained. However, the materialization of this concern has been limited, as it appears that the Minister is afforded even greater discretion in the management of quotas. There are two recent cases from the Federal Court of Appeal that support this assertion.

*Kimoto v Canada*⁵⁶ was a 2011 Federal Court of Appeal decision addressing a Chapter 3 amendment to Canada and the U.S.'s *Pacific Salmon Treaty*. One of the requirements of the amendment was a reduction in the catch of Chinook salmon off the West Coast of Vancouver Island. It was also agreed that the U.S. would provide \$30 million ("U.S. Fund") to support a mitigation program in the commercial salmon troll fishery.⁵⁷

The Minister decided to achieve the agreed upon reduction by lowering the commercial quota allocated to Area G troll fisheries by 50%. As for how to allocate the U.S. Fund, after consultations with various stakeholders the Minister adopted a program that would allocate a portion to a voluntary licence retirement program for troll licence holders in Areas F, G and H.⁵⁸ Mr. Kimoto ("Applicant"), on behalf of all Area G troll licence holders, sought judicial review of this licence retirement program.

The Applicant claimed that the U.S. Fund was specifically adopted to compensate those who were adversely affected by the Treaty, namely the Area G troll fishers. Failing this, the Applicant argued, it was the Area G fishermen's right to be compensated because they had a property right to the fish they no longer had access to. Specifically, the Applicant reasoned that because they had property rights to the fish, any quota expropriation not explicitly authorized by the *Financial Administration Act*⁵⁹ would be illegal.⁶⁰

The Court rejected both of these claims. The first claim was dismissed because the Treaty was silent on the requirement that only those fishermen being directly affected would be compensated.⁶¹ In regards of the property rights claim, the Court found this argument to be "ill-founded" and the "antithesis of fisheries being the common property of all, a principle deeply ingrained in Canadian Law."⁶² The Court also reaffirmed the limited application of the *Saulnier* decision – commercial licences were only recognized as property for the purposes of the *BIA* and the *PPSA*.⁶³ Thus, even though only Area G fishermen were having their quota reduced, the Court still held that they had no right to compensation. The proposition that commercial fishers have no legal property right to fish and no right to compensation for quota appropriation was reaffirmed in a decision released this year. In *Malcolm v Canada*,⁶⁴ the Applicant, on behalf of all commercial halibut licence holders in B.C., sought review of the Minister's decision to reduce the commercial fishery's share of the total allowable catch (TAC). The Applicant argued that the reallocation of 3% of the TAC from the commercial to the recreational sector

⁵⁶ 2011 FCA 291 [*Kimoto*].

⁵⁷ *Ibid* at para 3.

⁵⁸ *Ibid* at para 5.

⁵⁹ RSC 1985, c F-11 (*FAA*).

⁶⁰ *Supra* note 18 at para 12

⁶¹ *Ibid* at paras 9 – 11.

⁶² *Ibid* at para 12.

⁶³ *Ibid*.

⁶⁴ 2014 FCA 130 [*Malcolm*].

without compensation was inconsistent with longstanding DFO policy and the Minister's assurance that market mechanisms – the recreational sector would pay market rates for the quota – would be used for the reallocation. The trial judge dismissed the application for review and the Federal Court of Appeal dismissed the appeal.

Within the Court of Appeal's judgment there are several illuminating statements pertaining to the proprietary status of quota and the Minister's discretion in managing quota. Notably, the Court adopted the strong statements written by Pelletier J.A in his concurring judgment in *Arsenault v Canada (AG)*. In *Arsenault*, Pelletier J.A. held that because "there is no vested right to a given quota, there can be no right to compensation arising purely from the fact of loss of quota."⁶⁵ This statement applies even if the Minister assures the adversely affected fishermen that they will receive compensation for reallocation.⁶⁶

IMPLICATIONS OF *KIMOTO* AND *MALCOLM* DECISIONS

According to Christine Stewart, a quota holding is not personal property in the resource *per se*, but rather an exclusive right to harvest; it is a *usufruct* right.⁶⁷ This right to a percentage of the TAC eliminates the incentive to 'race to fish' because the quota will always be available.⁶⁸ Fishermen, therefore, become custodians of the resource as conservation ensures future income streams.⁶⁹ Given this belief, it is understandable that some would find the *Kimoto* and *Malcolm* decisions problematic. There is research to support the claim that a fear of appropriation without compensation reduces a fisherman's efforts to fish in a custodial manner.⁷⁰ There are also commercial implications. The trial judge in *Malcolm v Canada* aptly captured the consequences of appropriating quota without compensation:

Commercial fishermen depend on the stability of the industry in order to make informed investment and business decisions. Many have incurred substantial debt, confident that they will have access to a steady allocation of the TAC. Without a doubt, reducing their portion of the TAC without a market based method of compensation will negatively impact the livelihood of many commercial fishermen.⁷¹

Thus, while the Minister's decisions to reduce quota without compensation, and the courts supporting those decisions, may be viewed as a reassurance that the fisheries are not being privatized, it is likely that the decisions have left commercial fishermen even less satisfied with how the fisheries are being managed.

⁶⁵ *Malcolm*, at para 43, citing *Canada (AG) v Arsenault*, 2009 FCA 300 at para 57.

⁶⁶ *Ibid* at para 46.

⁶⁷ Christine Stewart, *Legislating for Property Rights in Fisheries*, (Rome: Food and Agriculture Organization of the United Nations, 2004) at 13.

⁶⁸ *Ibid*.

⁶⁹ *Ibid* at 5; see also Le Gallic, *Using Market Mechanisms to Manage Fisheries: smoothing the path* (Paris: OECD, 2010).

⁷⁰ Adam Soliman, "Using Individual Transferable Quotas (ITQs) to Achieve Social Policy Objectives: a Proposed Intervention", online: (2014) *Marine Policy* 45, 76-81 <<http://www.elsevier.com/locate/marpol>>.

⁷¹ *Malcolm v Canada (Fisheries and Oceans)*, 2013 FC 363 at para 68 (*Malcolm1*).

SECTION II

THE MINISTER'S DISCRETION AND THE DISTINCTION BETWEEN LICENCE AND QUOTA MANAGEMENT
Justice Binnie in *Saulnier* confirmed that, despite the Court's recognition of a licence as property, the greatest "wart" on a licence continues to be the Minister's broad discretion:

Section 7(1) of the Fisheries Act speaks of the Minister's "absolute discretion". The Minister gives and the Minister (when acting properly within his jurisdiction under s. 9 of the Act) can take away, according to the exigencies of his or her management of the fisheries. The statute defines the nature of the holder's interest, and this interest is not expanded by our decision that a fishing licence qualifies for inclusion as "property" for certain statutory purposes.⁷² (emphasis added).

...

To say that the fishing licence is coupled with a proprietary interest does not encumber the Minister's discretion with proprietary fetters.⁷³

Noticeable in the first statement by Justice Binnie is the reference to s.9 and the resulting jurisdiction the Minister has in retracting a licence. Under the *Fisheries Act* there are two clear periods that determine the amount of statutory discretion granted to the Minister. According to s.7, the Minister has "absolute discretion" in licence issuance. According to s. 9, once the licence is issued the Minister's discretion is significantly diluted:

9. The Minister may suspend or cancel any lease or licence issued under the authority of this Act, if
 - a) the Minister has ascertained that the operations under the lease or licence were not conducted in conformity with its provisions; and
 - b) no proceedings under this Act have been commenced with respect to the operations under the lease or licence.

However, because the *Fisheries Act* makes no reference to quotas it is understood that the Minister is granted even greater discretion in quota allocation and management. This has been confirmed by cases that have followed the *Saulnier* decision. In *Arsenault v Canada (AG)*,⁷⁴ a group of 27 traditional crabbers from Prince Edward Island ("Applicants") applied for a judicial review of the implementation of a quota reduction compensation plan ("management plan").

Under the management plan the Minister publicly agreed to provide \$37.4 million to the crabbers to compensate for a 10.85% reduction in their share of the TAC, without conditions. However, before issuing the financial assistance the Minister required the crabbers to sign a release that would prohibit any claims against the Crown relating to the management plan. The Applicants refused to sign the release and consequently missed the deadline to apply for the compensation.⁷⁵

⁷² *Supra* note 1 at para 48.

⁷³ *Ibid* at para 35.

⁷⁴ 2009 FCA 300 (*Arsenault*) (application to leave rejected - 2010 CanLII 17154 (SCC)).

⁷⁵ *Ibid* at paras 11-16.

The Applicants argued that the alteration to the plan offended s.9 of the *Fisheries Act* and they filed an application for judicial review seeking: (1) a declaration that the Minister exceeded his statutory authority; (2) a writ of mandamus requiring the issuance of financial assistance without conditions. The trial judge held for the Applicants. Justice Blanchard found that the Minister had a public legal duty – akin to forming a contract – to implement the plan as was announced.⁷⁶ The Federal Court of Appeal overturned the trial decision, finding that the Minister was still operating within his “absolute discretion” and therefore the decision to alter the management plan was not reviewable.⁷⁷

The majority decision from the Federal Court of Appeal provided clarity in the distinction between quotas and licences in regards to the Minister’s discretionary authority. Because there is no equivalent to s.9 restraining the Minister’s post-issuance management (and appropriation) of quota, it is understood that the Minister always maintains “absolute discretion”. The extent of this discretion was illuminated in the *Carpenter Fishing Corp v Canada*⁷⁸ decision, which was cited with approval in *Arsenault*:

... when examining the exercise by the Minister of his powers, duties, functions and discretion in relation to the establishment and implementation of a fishing quota policy, courts should recognize, and give effect to, the avowed intent of Parliament and of the Governor in Council to confer to the Minister the widest possible freedom to maneuver.⁷⁹

WHEN ARE THE MINISTER’S MANAGEMENT DECISIONS REVIEWABLE?

The Federal Court of Appeal recently addressed this question. In *Malcolm*, the Court held that the Minister’s decision is subject to a standard of reasonableness, with reasonableness being a flexible standard to be considered with mind to the particular context and prior jurisprudence.⁸⁰ Because the decision to reallocate quota is discretionary and in the nature of a policy action, the Court held that it is subject to three considerations to determine whether it was reasonable:

1. Was the decision made in bad faith?
2. Did the Minister rely upon considerations that are irrelevant or extraneous to the statutory (*Fisheries Act*) purpose?
3. Does the policy conform to the principles of natural justice – was it irrational, incomprehensible or otherwise the result of an abuse of discretion?⁸¹

Thus, as long as the Minister does not offend one or more of these considerations, and makes quota management decisions in the public interest, then the substance of the decision is not reviewable by the courts.

WHAT IS REQUIRED TO MAKE A DECISION IN THE PUBLIC INTEREST?

In *Malcolm*, the Applicant argued that the reallocation of quota would undermine the Minister’s primary public duty to ensure conservation of the fisheries. Evidence of the recreational sector consistently

⁷⁶ *Ibid* at para 30.

⁷⁷ *Ibid* at paras 43-44.

⁷⁸ 1997 CanLII 6391 (FCA) (*Carpenter*).

⁷⁹ *Supra* note 37 at para 43.

⁸⁰ *Supra* note 27 at para 31.

⁸¹ *Malcolm*, *Supra* note 27 at para 35. The Court relied on a *Maple Lodge Farms v Canada* [1982] 2 SCR 2 and *Dunsmuir v. New Brunswick*, 2008 SCC 9 to determine the circumstances when a discretionary policy decision is reviewable and by what standard the decision is to be reviewed.

exceeding its quota and its lack of catch monitoring provided support for this assertion.⁸² However, the trial court judge ultimately concluded:

...the Minister's discretion to manage the fishery is not unbridled. It is subject to the over-arching responsibility to preserve the resource. The Minister is obliged to ensure that Canada remains within the TAC and to take effective enforcement measures to ensure that limits are respected. In this regard, from the perspective of the halibut fishery, as a resource and the Minister's legal obligations to preserve the fishery, it is irrelevant who catches the fish; what is important is that the TAC is respected⁸³ (emphasis added).

Given this statement it appears as though there is little that is required from the Minister to manage the fisheries on behalf of the public. As was addressed in *Malcolm*, there are always competing political pressures on the Minister. A real concern is that small-scale commercial fishermen with relatively little resources are losing recognition as the recreational and large-scale commercial participants pressure the Minister to adopt policies that will favor their economic aspirations.

⁸² *Malcolm1*, *supra* note 33 at paras 69-70.

⁸³ *Ibid* at para 75.

APPENDIX 2: DE FACTO PROPERTY RIGHTS

KEGAN PEPPER-SMITH, UBC FACULTY OF LAW

Property in its purest form confers a bundle of rights – the perpetual right to use, enjoy, and dispose – on the holder of a tangible or intangible thing. From an economic perspective, there are four essential characteristics of property: exclusivity, durability, security, and transferability. As the strength of each of these increases, so too does the inherent value of the property.⁸⁴ The property rights classification of licences and quotas in commercial fisheries is placed somewhere on a spectrum, with full proprietary rights at one end and revocable privileges at the other. Licences and quotas in Canada’s commercial fisheries are generally thought to fall somewhere in the middle these two extremes – they are more than a privilege, but less than a full proprietary interest.⁸⁵ What follows is a brief overview of this quasi-property situation with a particular focus on BC’s commercial fisheries.

Although the federal government through Fisheries and Oceans Canada (DFO) is adamant that licences and quota are simply privileges, in practice it is evident that both bestow quasi-property rights on holders. In BC, this property in practice (de facto property) is augmented by the limited restraints imposed on quota holdings and dealings. There are three primary characteristics of this “free-market” management regime: unconstrained transferability, perpetual holdings, and political pressures.

Quota holders are granted an exclusive right to harvest their portion of the TAC, and, under BC’s opaque and largely unregulated quota management regime, with this exclusive right comes the essentially unfettered freedom to transfer. When quota is bought, sold, or leased, the object of the transaction is a *usufruct* right to enjoy and draw all the profit from a previously common resource,⁸⁶ effectively turning the fish into “paper fish, a hypothetical but [highly] valuable commodity.”⁸⁷ The unconstrained leasing of quota is particularly problematic as corporations or “armchair fishers” hold high levels of quota and lease it to small-scale fishers for tied and/or exorbitant prices.⁸⁸

Section 7(2) of the *Fisheries Act* sets a nine-year limit on any commercial licence issued by the Minister, but nowhere in the *Act* or its regulations does it state how long quota is issued for. Thus, as evident through practice, it is understood that quota is granted in perpetuity to those who were involved in the particular fishery at the time it moved into a rights-based management system. This windfall for first-generation quota holders is granted at the expense of new entrant hopefuls who often face prohibitively expensive quota leasing or purchasing costs.⁸⁹

⁸⁴ Christine Stewart, *Legislating for Property Rights in Fisheries*, (2004) FAO legislative Study 83 (Rome: FAO) (Stewart).

⁸⁵ Adam Soliman, Individual Transferable Quotas in World Fisheries: Addressing Legal and Rights-based Issues, (2014) *Ocean and Coastal Management* 87, 102 – 113, at p 108.

⁸⁶ Stewart at p 13.

⁸⁷ Caroline F. Butler, *Paper Fish: The Transformation of the Salmon Fisheries of British Columbia*, (2008) *American Fisheries Society Symposium* 68, at p 2.

⁸⁸ Evelyn Pinkerton & Danielle N. Edwards, The Elephant in the Room: The Hidden Costs of Leasing Individual Transferable Fishing Quotas, (2009) *Marine Policy* 33, 707-713.

⁸⁹ Evelyn Pinkerton & Danielle N. Edwards, *Ignoring market failure in quota leasing?*, (2010) *Marine Policy* 34, 1110-1114.

Finally, catch shares in BC are particularly problematic because of DFO's failure to implement an industry or fishery-wide quota policy. As a result, commercial fisheries are operating in a grey area of ownership. The Minister can withdraw and/or reallocate quota without compensation.⁹⁰ But the practice of automatic renewing of licences, the level of transferability of licences and quota, and the perpetual nature of quota holdings naturally inclines industry participants to claim ownership and demand compensation for expropriation.⁹¹ However, historical compensation offerings in the form of voluntary buyback programs have been inconsistent and appear to be largely motivated by political considerations. Consequently, small-scale commercial fishers and coastal communities are not only being squeezed out of the industry by loss of access, they are also losing their political clout to slow or reverse this process as other industry participants – corporations, First Nations, and recreational fishers – increase their participation and political power.

⁹⁰ See *Malcolm v Canada* (Minister of Fisheries and Oceans), 2014 FCA 130, *aff'd* 2014 CanLII 68699 (SCC).

⁹¹ See *Doug Kimoto v Canada (AG)*, 2011 FCA 291 at para 12 where the plaintiff argued that the SCC's *Saulnier v Royal Bank of Canada*, 2008 SCC 58 decision bestowed quota holders with proprietary rights and there a right to compensation for expropriation. Both levels of court rejected this argument.

APPENDIX 3: A BRIEF HISTORY OF FLEET REDUCTION IN BC

DENNIS BROWN

1954 H. Scott Gordon publishes his seminal *Great Law of Fishing*, which posits that all open access fisheries attract more capital and labour than necessary.⁹²

1960 Dr. Sol Sinclair, an economist from Manitoba, is commissioned to study the West Coast Fishing Industry. Like Scott Gordon, Sinclair concludes that all open access fisheries are uneconomic, and offered a series of recommendations to address the problem of “too many fishermen chasing too few fish.”⁹³

1969 Garret Hardin publishes an article in *Science* claiming that common property is essentially treated as nobody’s property, and therefore doomed to suffer the “tragedy of the commons.”⁹⁴ While Hardin never offers evidence of this ideological claim, this work becomes enormously influential within economic and government circles throughout the world.

James A. Crutchfield and Guilio Pontecorvo publish *The Pacific Salmon Fishery: A Study in Irrational Conservation*.⁹⁵ The authors claim that all fisheries management, no matter how sophisticated, is doomed to failure so long as access to the fishery is based on common property rights rather than market-based rights.

Greatly influenced by Crutchfield and other economists, the Government of Canada introduces the Davis Plan, the first limited entry licensing scheme in the Pacific salmon fishery – and perhaps the world. The Minister of Fisheries at the time is Jack Davis, an economist. The fleet is reduced by 30 percent, ostensibly to “improve incomes of fishermen.” Conservation is mentioned in only the most cursory way.

1973 In response to the overcapitalization precipitated by the Davis Plan, DFO commissions the West Coast Fleet Development Committee to develop potential solutions. Two prominent figures on that committee are Dr. Peter Pearse of UBC and Mike Hunter, a DFO economist who later becomes President of the BC Fisheries Council. The idea of individual quotas is raised for the first time in this report as a means of reducing capitalization – ostensibly by “ending the race for the fish.”⁹⁶

⁹² Gordon, H.S. “The economic theory of a common-property resource: the fishery.” *Journal of Political Economy* (1954) 62: 124-142.

⁹³ Sinclair, Sol. “Licence Limitation: A Method of Economic Fisheries Management.” *DFO* (1960).

⁹⁴ Hardin, Garrett. “The Tragedy of the Commons.” *Science* (1969) 162: 1243-1248.

⁹⁵ Crutchfield, James A. and Guilio Pontecorvo. *The Pacific Salmon Fishery: A Study in Irrational Conservation*. John Hopkins Press, 1969.

⁹⁶ “West Coast Salmon Fleet Development Report.” *DFO* (April 1973).

A minority report by two UFAWU members on the West Coast Development Committee opposes the introduction of quotas, and instead calls for the elimination of corporate licence ownership and the addition of an owner/operator clause.

- 1978 Prime Minister Trudeau commissions the Economic Council of Canada (ECC) to analyze all aspects of government regulation of the Canadian economy. A series of reports on the Canadian commercial fishery are subsequently published. The central figure in these reports is Dr. Peter Pearse of UBC. The ECC recommends that the commercial fishing fleet be massively reduced, with “perverse subsidies” to the industry eliminated. The report speculates that the fishery could be best rationalized by granting fish processing companies “enterprise allocations,” but notes that such a policy would be politically unpopular. As an alternative, the notion of “stinted landing rights” for fish harvesters is introduced – an early name for what would later become known as IVQs or ITQs.^{97,98}
- 1979 DFO Deputy Minister A.H. Needler writes a report claiming that the entire BC salmon catch could be taken by the existing fleet in just six days.⁹⁹ While Needler provides no evidence to back up this claim, he argues for major reductions in the commercial fishing fleet.
- 1980 In response to economic problems on the West Coast, DFO commissions Dr. Peter Pearse and Fernand Doucet to do a study of the fishing industry. Pearse and Doucet offer a series of economic proposals, but more importantly call for a Royal Commission, which Pearse later ends up heading.
- 1981 UBC researcher Brian Hayward publishes an article in Issue 50 of *BC Studies* that notes that the Davis Plan, while arithmetically reducing the number of fish harvesters, has led to an increase in the catching power of the fleet and an enormous increase in capitalization.¹⁰⁰ This capitalization, which was almost non-existent prior to the Davis Plan has haunted the industry ever since.
- 1983 The Royal Commission on Pacific Fisheries, also known as the Pearse Commission, conducts the most comprehensive study of Pacific fisheries to date. Pearse proposes a vast number of recommendations, almost all of which have since been adopted. Although Pearse broaches the subject of conservation, his prime focus is economics. Referencing the “tragedy of the commons,” Pearse recommends that all common property fisheries be subject to ITQ provisions. This, he reasons, would reduce capitalization by “ending the race for the fish,” thus allowing licence holders to harvest fish at the lowest possible cost. (There is no evidence that this has ever happened.) Pearse hypothesizes that ITQ fisheries will provide greater “economic rent” to the Crown through landing taxes.

⁹⁷ Pearse, P.H. with J.E. Wilen. “Impact of Canada’s Pacific Salmon Fleet Control Program.” *Journal of the Fisheries Research Board of Canada* 36.7 (1979): 764-769.

⁹⁸ Pearse, P.H. “Property Rights and the Regulation of Commercial Fisheries.” *Journal of Business Administration* (1980): 185-209.

⁹⁹ Needler, A.W.H. “Evolution of Canada’s Fisheries Management towards Economic Rationalization,” *Journal of the Fisheries Research Board of Canada* 36.7 (1979): 716-724.

¹⁰⁰ Hayward, Brian. “The BC Salmon Fishery: A consideration of the effects of licensing.” *BC Studies: The British Columbian Quarterly* 50 (1981): 39-51.

Nevertheless, Pearse does **not** recommend ITQs for either the salmon or herring fisheries, noting that they are too complex for effective ITQ management. Instead he recommends fleet reduction through stackable area licensing provisions, along with other measures later incorporated into the 1996 Mifflin Plan.

Perse also recommends that all quotas last for only 10 years at a time, whereupon they would be subject to an open bidding process for all interested applicants.

Perse suggests that ITQs first be implemented in a few small fisheries. The first ITQ pilot program is subsequently introduced in the abalone fishery – and closes soon after due to overfishing by quota holders.

On the Royal Commission, Pearse spends considerable time investigating ways to enhance Aboriginal participation in commercial fisheries. In a recommendation which would prove prescient, he notes that ITQs would serve as a less controversial way of transferring – through the means of market devices – a common property resource to First Nations from an already oversubscribed fishing fleet.

1984 Then-Minister of Fisheries Pierre Debane accepts all of Pearse’s recommendations for fleet rationalization, including ITQs, area licensing, and a licence retirement program. Debane does not, however, accept Pearse’s recommendation to make all quotas time-limited and subject to periodic renewal bidding. Debane claims that conservation is DFO’s overriding concern, but almost all of the Debane Plan is focused on economic problems. The Debane Plan was never implemented as the Liberal government lost the next election. However, it is worth noting that its recommendations were almost identical to those of the Mifflin Plan in 1996.

1985 Incoming Tory Prime Minister Brian Mulroney appoints Erik Nielsen to conduct a thorough review of the Canadian economy, with special emphasis on reducing government intervention and regulation. One of the subsidiary reports of the Task Force deals with Canadian fisheries, recommending major commercial fleet reduction as well as reduced government spending on DFO. ITQs are advanced as a desirable option.

1989 A leaked discussion paper by the Economic and Planning Branch of DFO titled *Vision 2000* calls for major fleet reduction, ITQs, area licensing, and major reductions within DFO.¹⁰¹

1990 DFO announces its intention to introduce an ITQ pilot program in the halibut fishery, very similar to what the Debane Plan had proposed in 1984.

A number of fisheries once included under the “A” salmon licence are separated and put under limited entry restrictions based on fishermen’s past landing records. The number of participants

¹⁰¹ Canada, Department of Fisheries and Oceans. “Vision 2000: A Vision of Pacific Fisheries at the Beginning of the 21st Century.” *Vancouver: DFO Pacific Region Strategic Outlook, Discussion Draft* (June 1989): 9.

in the crab, prawn, and shrimp fisheries is dramatically reduced, as per the recommendations of *Vision 2000*.

1991 Dr. Scott Parsons, Deputy Minister for Science at DFO, publishes *Management of Marine Fisheries in Canada*.¹⁰² In it, he catalogues the history and development of DFO policies as they relate to broader national politics and economics.

1993 Halibut ITQs are introduced. No conservation issue is identified.

1995 Former Tory Fisheries Minister John Fraser is commissioned by DFO to investigate the so-called “missing fish” problem in the 1994 Fraser River sockeye fishery. While Fraser could not determine the cause of the “missing fish,” he recommends that the West Coast salmon fleet be reduced substantially. In his report, Fraser claims that the commercial fishing fleet has fished the Fraser sockeye run to within “12 hours of disaster.” This, following on the heels of the East Coast cod collapse, inspires massive public concern. From this point on, DFO begins to emphasize conservation as its *raison d’être* for fleet rationalization rather than economics – even though Fraser provides little proof to back up his claim.

Following closely after the Fraser Report, DFO announces an Industry Roundtable on fleet reform and reduction. This Roundtable is alleged to have reached “consensus” that the Pacific salmon fleet be reduced by 30-50%, although there is considerable controversy about this point.

1996 The Pacific Salmon Fleet Restructuring Program, or the Mifflin Plan, is announced. While citing conservation concerns, its prime focus is on economics. A major licence retirement plan is implemented, as well as stackable area licensing and single gear licensing. The commercial fleet drops by one third.

1998 The Anderson Plan results in an additional round of licence retirement. Anderson announces severe harvest restrictions in all fisheries, ultimately paving the way for the Wild Salmon Policy of 2005. The commercial fleet is reduced by almost two-thirds under the Anderson Plan.

2004 The Pearse/McRae report on fisheries in the post-land claims era is released. Pearse and McRae recommend that significant portions of the TAC in all fisheries be transferred to Aboriginal fisheries. ITQs are recommended as one way to accomplish this goal. Pearse recommends that ITQs be introduced in the salmon fishery, but does not explain his departure from his 1983 opinion that ITQs were unworkable for salmon.¹⁰³

2005 The Wild Salmon Policy (WSP) is introduced.¹⁰⁴ It creates an entirely new management regime, in which commercial salmon harvest rates drop from 70-80% of biomass to 20-30%.

¹⁰² Parsons, L.S. *Management of Marine Fisheries in Canada*. National Research Council Canada, Department of Fisheries and Oceans (1993).

¹⁰³ McRae, D.M. and P.H. Pearse. “Treaties and Transitions: Toward a sustainable Fishery on Canada’s Pacific Coast.” *DFO* (April 2004).

¹⁰⁴ Fisheries and Oceans Canada. “Canada’s Policy for Conservation of Wild Pacific Salmon.” *DFO* (June 2005).

- 2007 The \$150 million Pacific Integrated Commercial Fisheries Initiative (PICFI) program is announced with the goal of expanding Aboriginal participation in commercial fisheries. PICFI money is used to fund an ongoing licence and quota transfer program to First Nations fish harvesters.
- 2010 Dr. Carl Walters of UBC releases *Where Have All the Sockeye Gone?*, criticizing DFO's Wild Salmon Policy and suggesting that severe reductions in the commercial harvest rate of salmon have not resulted in improvements for most weak stocks of Fraser sockeye.¹⁰⁵ He suggests that underharvest has possibly depressed productivity rates for the stronger stocks through the negative effects of overescapement. Walters estimates that between 1995 and 2009, at least 24 million Fraser sockeye might have been safely harvested without compromising conservation, but were not due to DFO policies.
- 2011 Dr. Pearse appears as an expert witness in the Supreme Court Ahousaht case. As part of his testimony, Pearse provides a report titled *Management of the Pacific Fisheries: The Development of Fishing Rights and Fisheries Management on the Pacific Coast*. In this report, Pearse gives a retrospective and detailed account of the history of Pacific Coast management licensing policy, and in particular ITQs. While Pearse cites conservation to some extent, it is abundantly clear that his lifetime pursuit was to economically rationalize the fishery.

¹⁰⁵ Walters, C. "Where have all the sockeye gone?" < <http://www.sfu.ca/grow/science/resources/1288901141.pdf>>