ITQS

Fishing for a pension or peanuts?

Individual transferable quotas favour armchair fishers, not active fishermen, in the halibut fishery of British Columbia

The west coast halibut fishery of North America has a long history of regulation. Under the auspices of the International Pacific Halibut Commission, from its southern limits in California to its northern bounds in Alaska, the fishery has been regulated and researched since 1923.

However, the management of the 'derby-style' fishery came under scrutiny in British Columbia (BC), Canada, during the late 1980s. Open for very brief periods (six days in 1990), the fishery operated with no quota or gear restrictions, and stayed open until the total allowable catch (TAC) was reached.

The 'race for fish' during these brief fisheries seasons raised many questions, particularly with regard to safety, efficiency and sustainability. In 1991, the Canadian Department of Fisheries and Oceans (DFO) initiated a programmme for quota-based management of the fishery. After the first two years, the quotas became transferable. The creation and implementation of an individual transferable quota (ITQ) programmme in the halibut fishery of BC by the DFO was subsequently analyzed by two papers published in 1995: "The Effects of Individual Vessel Quotas in the British Columbia Halibut Fishery," by Keith Casey et.al. *Marine Resource Economics* 10: 211-230; and "Canada's Pacific Halibut Fishery: A Case Study of an Individual Quota Fishery," by Bruce Turris in *Limiting Access to Marine Fisheries: Keeping the Focus on Conservation*. Karen Gimbel ed. Center for Marine Conservation, Washington DC.

These two studies characterized the transformation of the derby-style fishery to a quota-based harvest as a success story, and focused on the positive implications for fishery management. These analyses were made, however, before the development of the current system of transferability within the fishery. Transferability was prohibited during the first two years of the pilot programme (1991 and 1992), and was limited during the next several years by a block-system (see below). The system of quota leasing that currently dominates the fishery has resulted in several negative impacts, especially to younger fishers and those who were allocated relatively small quotas in 1991. There are also indications of negative ecological impacts to stocks caught as by-catch in the halibut fishery.

This article seeks to update the findings of the two reports and to indicate the impacts of transferability within this quota-based fishery. The data is drawn from DFO statistics on the halibut fishery, and three years of ethnographic fieldwork with halibut fishers in Prince Rupert, BC.

The pre-quota fishery has been characterized as "unsafe, overcapitalized, wasteful and difficult to manage". In 1990 the BC halibut fishery lasted a total of six days, compared to a 60-day season in 1982. Since licence limitation in 1979 (to 435 vessels), fishing capacity had been steadily increased by larger crews, electronic gear, circle hooks and automatic baiters.

Low prices

The 'derby' fishery of the 1980s was described as "frantic", resulting in lost gear and lost lives. The majority of the fish was frozen upon delivery, and ex-vessel prices were relatively low (1988-1990 BC average ex-vessel price was Can$1.72/lb). The TAC for halibut was exceeded in eight of the 10 years of fishing in the 1980s. It has been suggested that the DFO was concerned about the discard of by-catch species during the halibut openings—rockfish were discarded to save room in the fish-hold for halibut.

However, rockfish were not discarded by all boats during the derby fishery, and the current restrictions on rockfish landings do result in the discarding of rockfish by-catch during the halibut fishery.

A 1989 survey of vessel owners suggested that 77 per cent of the respondents (which represented 82 per cent of licence owners) were interested in discussing the potential of quota-based management for the halibut fishery. The final proposal for quota-based management was supported by 70 per cent of vessel owners and opposed by the Deep Sea Fishermen's Union (crew union) and large processing companies.

The halibut TAC for BC was divided between the 435 licensed vessels, 70 per cent based on their best annual catch in the years between 1986 and 1989 and 30 per cent based on vessel length. The season was lengthened to eight months, during which the vessels could fish at any time.

The harvest of each vessel was validated by dockside counts, which the fishers paid for through a per-pound levy. The fishery became the only one in North America where the costs of management were totally recovered from participants. There was no transferability for the first two years. After two years, temporary and permanent transfers began.

The longer season spread out deliveries and resulted in 94 per cent of the harvest arriving at the market fresh. This reportedly increased ex-vessel prices by 55 per cent in the first two years of the programme. The shift to a fresh product allowed smaller processing firms to increase their involvement in halibut processing, as the capital requirements of participation were drastically reduced. The percentage of Canadian fish landed at US ports decreased.

The longer season also allowed fishers to avoid bad weather, and fish at a reduced pace, presumably increasing the safety of the fishery. The DFO was satisfied that discarding was not a major problem and that reductions in lost gear resulted in lower mortality rates through 'ghost fishing'.

Transferable quota

A survey of licence holders in early 1994 received 135 responses (31 per cent). During the first year of transferability, 70 per cent had fished their entire quota in 1993, 17 per cent fished their own and leased more, eight per cent had leased out all of their quota, and five per cent had leased half of their quota.

It was also found that 44 per cent of vessels reduced their crew during the two years after quota, reducing crew employment by 32 per cent. Eighteen per cent of this was attributed to crew size reductions, and 14 per cent to crew displacement from non-active vessels. At the time, 59 per cent of crew shares increased on vessels operating with fewer crew. Shifts in the arrangement of shares to accommodate the value now inherent in quota itself have also been noted in the two 1995 reports referred to above.

While crew employment decreased by 25 per cent in the first year of the programme, it has been suggested that the total number of man-hours in the fishery has increased. However, this cannot be understood as a positive shift, as halibut crew do not receive an hourly wage. In fact, this suggests a further deterioration of crew income.

At the time of the licence holder survey, transferability was limited by a block system. The initial allocation was divided into two equal shares. Two could be leased out, or two additional leased to harvest. There were 74 licensed vessels no longer participating in the fishery. Those vessels with larger allocations were more likely to lease additional quota, suggesting a movement towards consolidation.

The changes in the halibut fishery have been described as positive by one source. But this was based on a survey that was both extremely early in the development of the new fishery, and only dealt with the attitudes of vessel owners to the regulatory shift. It did not take into account the experiences of crew, remaining and displaced, and was unable to anticipate the extremely significant impact of the quota leasing arrangements that have come to dominate the fishery.

In the years subsequent to this early survey, some of the limits on transferability were lifted. Quota transfers between boats can be of any size, and reflect any percentage of the total allocation, and are not limited in number. The maximum amount of the TAC that can be held by, or fished by, any license is one per cent. At a TAC that floats around the 10 mn lbs mark, as it has for the BC halibut fishery for the past several years, a full 'tab' of halibut is in the vicinity of 100,000 lbs.

The lifting of the transferability limits has resulted in considerable changes to fishery participation rates. The number of active vessels has decreased considerably during the decade since quota transferability was implemented. In 2002, there were only 214 active licences, out of the 435 licensed vessels, that made halibut landings, with 221 licence owners leasing out their quota to another vessel. Compared to 196 in 1998, 422 licences were involved in quota transfers, with approximately 65 per cent of the TAC involved in temporary transfers. While the DFO statistics do not allow for accurate isolation of the lessee/lessor ratios, it appears that there are approximately equal numbers of licences leasing out and leasing in.

The quota leasing structure negatively impacts lessee vessel owners, and almost all crew on halibut vessels. Halibut quota is usually leased for a specific price per pound before the fish is harvested, with the processing company acting as a middleman and financier. Active fishers lease various units of quota (up to one per cent of the TAC), and quota owners are usually paid upfront by the fishing company. The cumulative lease prices then become a debt of the active fisher to the processing company, obligating them to sell their harvest to that company. When an active vessel delivers halibut, the lease price is deducted from the ex-vessel price of the fish, in addition to the management fees that are part of the mandatory enforcement and validation system. Whatever is left over is the true price paid to the skipper and crew for their labour and risk.

Averaged example for 2002 halibut season, derived from interviews with halibut fishers.

Ex-vessel price /lb	Can$3.83
Quota lease price /lb	Can$2.35
Management fees /lb	Can$0.28

Can$1.20/lb balance for expenses, crew and boat shares

This examples shows that in 2002 the return to those involved in harvesting the resource was approximately half of the amount paid to the 'armchair' fisherman who was allocated quota in 1991 or bought quota in the succeeding years.

The per-pound lease price for halibut quota fluctuates depending on a number of factors, but it is difficult to identify a determining factor, with individual fishers explaining the price relationship differently. Lease prices are tied to quota purchases prices, and to ex-vessel prices, which are, in turn, related to purchase prices, resulting in reciprocal and circular relationships. The following factors appear to influence, or have influenced, lease prices at different moments during the period of transferability:

1. The lease price appears to be tied to ex-vessel prices for halibut, and has a reciprocal relationship with the per-pound purchase price for halibut quota. Higher ex-vessel prices can raise the price of halibut leases during any given fishing season. The purchase price of quota is increased by rising lease prices, but can also influence pre-season lease prices based on a percentage relationship between quota price and lease price (see point 3).

2. Some quota investors seek a 10 per cent return on their investment. A quota-owner who paid Can$25/lb for quota often wants to see a Can$2.50/lb lease price for his fish. This 10 per cent return reflects the way in which quota has come to be understood as an investment, similar to playing the stockmarket.

3. There appears to be a control factor on the lease prices that leaves a target of Can$1.00/lb available to the lessee for expenses, crew and boat share. This is an arbitrary amount that has developed as a baseline 'wage'.

4. The upfront financing of halibut quota leases by the processing companies has had an inflationary effect on the lease price. The companies' ability to pay lease prices before the opening of the halibut season has weakened the relationship between ex-vessel price and lease price. Furthermore, the competition between companies for access to halibut landings encourages the companies to pay high lease prices in order guarantee that fish will be sold to them. This cost is then transferred to lessee fishers.

Standard price

During the first few years after the introduction of individual vessel-based quotas (IVQs), the size-based price split in ex-vessel halibut prices was not common. Most processors reportedly paid a standard price for all sizes of halibut. However, the price differential for three size categories of halibut has become standard once more. Halibut are graded by size: up to 40 lbs, 40-60 lbs, and 60 lbs plus, with the larger fish being worth more. The price differential can reach 40 cents per lb.

The quota leasing system generally encourages the active fishermen to achieve the highest prices and profit margin possible, by conducting longer trips, and catching large fish that will receive the greatest price. However, there is very little indication of high-grading for size in the fishery due to the effort required to catch the fish, time restrictions due to other fisheries (that is, salmon), and weather concerns.

However, the Can$1/lb target tends to impact on the price and pay structure during periods of high ex-vessel prices. The 2003 season saw extremely high ex-vessel prices for halibut, reaching above the Can$5 mark. Some quota owners put their quota on the market at a fixed price per pound for the lessee, rather than at a fixed lease price. This fixed crew remuneration at relatively low levels, whilst allowing for windfall profits for the quota owners.

For example, a Prince Rupert fisherman fished halibut quota for Can$1.10/lb, which left the increasing value from high ex-vessel prices available to the quota owner. While this has not become the standard agreement, it suggests the potential for a shift towards fishing for wages. Some quota owners who structure their agreements this way stipulate that the quota be fished during the autumn months when the prices are relatively higher. This can force lessees to fish in more inclement weather, reducing the assumed safety impacts of quota-based management.

Price differentials and 'inverted' lease agreements (based on a fixed per lb rate) encourage some quota owners to refrain from leasing their quota out during the early part of the season, leading to lease price speculation. Owners can speculate on different ex-vessel prices throughout the season, and on the lease prices paid by various companies.

The competition between processing companies for access to halibut has increased the power of the quota owners to set lease prices. Processing companies, acting as the middlemen for most leasing agreements, may acquiesce to high lease prices to secure access to halibut.

Low value

Crew shares have generally been reduced to less than 10 per cent of the after-lease value of the fish, which can be as low as three per cent of the ex-vessel price of the fish. This is the case for most boats, whether fishing owned or leased quotas. Previously, approximately 10 per cent of the ex-vessel price was more or less the crew-share norm, depending on the share agreements and crew size.

During the second half of the 1990s, most quota owners started to lease their quota to themselves, thereby removing a lease price from the gross earnings on owned quota. Crew on many boats, regardless of the relative percentages of owned or leased quota fished by the vessels, receive a crew share drawn from less than a dollar per pound. Thus many crew appear to be no better off if they fish on a boat with a large owned allocation of quota or on a boat for which the majority of the quota is leased. Family operations and vessels with long-term and steady crew provide the exception to this general tendency.

During the first two years of the ITQ programme, the value of halibut licences reportedly nearly doubled. More significantly, the purchase price of halibut quota has risen dramatically due to the steady income provided by leasing quota. Retired fishers can lease their quota holdings in perpetuity, often making more per pound leasing out their quota than they were paid for halibut in the late 1980s and early 1990s. In fact, the leasing system has encouraged many fishers to stay at home, as many suggest that the return for their labour, their risk, the wear on their boat and so on is not worthwhile. Leasing out their quota makes more economic sense than fishing it themselves.

The leasing option also encourages older fishers to transfer their other fishing investments into halibut quota. Fishers nearing retirement might sell a salmon licence and buy halibut quota, reflecting the leasing option and the current tax restrictions on liquidation of fishing assets. Fishers can sell another licence and buy halibut quota without a tax impact, whereas selling out of the fishing industry completely involves considerable tax losses. Halibut quota thus has become a retirement savings plan for older fishers. There is little economic incentive to sell their holdings to younger fishers.

Quota allocations and the leasing system have created a significant generation gap in the fishing industry. Those who were fishing in 1991 received allocations based on previous participation in the fishery. The price of halibut quota has risen from 0 in 1991, to highs of Can$35/lb in 2004. The estimation of the increased value of the initial windfall allocations is difficult as individual quotas fluctuate with the annual TAC, as they are a percentage of that total. The 1991 allocations, ranged from 4,000 lbs to 70,000 lbs, created a mean of 33,000 lbs. This mean allocation would now be worth Can$1,155,000, at a Can$35/lb quota price. At a current lease price of Can$2.80/lb, this quota could provide the owner with an annual income of Can$92,400.

Younger fishers, who were not participating in the fishery prior to 1991 must lease or purchase quota to fish, at these high prices. They thus face significantly higher debt-loads than previous generations of fishers. In order to own the means of production, they must not only purchase a vessel and gear, but also make even larger investments in licences and quota. Their ability to purchase quota is limited by the refusal of banks and other lending institutions to accept quota or licences as collateral. Generally, fishers can only borrow against the value of their vessel. Fishers who received an initial allocation in 1991 are better able to purchase quota and increase their holdings than younger fishers are able to buy into the fishery. Consolidation of quota ownership is an increasing concern.

The shift to quota-based management has resulted in some very positive changes in the BC halibut fishery including a longer season, ease of enforcement, catches below the TAC, and higher ex-vessel prices due to the shift to a fresh market. However, these gains might have been effected through other management tools rather than individual quotas.

Interviews with crew and young vessel owners in the BC halibut fishery suggest that the system of transferability has resulted in significant negative impacts to these groups.

Increased value

Fishers who were allocated quota in 1991 have seen the value of their allocation increase substantially. The current system allows them to lease their quota for more than 50 per cent of the ex-vessel price of the fish. The system has resulted in high levels of quota owner control of lease prices, incentives not to fish, and not to sell their quota.

Participation in the fishery has dropped to approximately 50 per cent, with half the fleet leasing their quota out and becoming 'armchair fishermen'. Crew employment and crew wages have been significantly reduced both by decreased rates of vessel participation, and by the leasing structure.

Vessel owners who were not allocated quota in 1991 must lease or buy quota in order to participate in the fishery. Many complain that the returns from fishing leased quota are so low that they cannot afford to invest in halibut quota. Thus, those who lease quota cannot easily accumulate enough capital to purchase the means of production, thereby perpetuating the leasing system. With the inversion of the lease structure, from flat rates for the lessor to flat rates for the lessee, during periods of high ex-vessel prices for halibut, there is a suggestion of shift towards something closer to a wage structure.

Thus, the benefits of IVQs to fishers have been concentrated on the 435 licence owners who participated in the fishery during the shift to quota-based management and who benefited from the initial allocations. Crew members and subsequent generations have been impacted negatively by the shift and the subsequent development of the leasing system.

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