

West Coast Fishing Fleet:

Analysis of Commercial Fishing Licence, Quota, and Vessel Values

As at March 31, 2012

Prepared for Fisheries and Oceans Canada, Pacific Region

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Introduction

This report offers assessments of licence, quota, lease, and vessel values as of March 31, 2012 for commercial fisheries in B.C. The assessments are based where possible on market transactions.

The valuations contained in this report represent the best efforts of the contractor to encapsulate prevailing asset value levels in the commercial fishery. The depth and quality of data upon which valuations are based varies by fishery – a few fisheries are active, with ample vessel and licence transactions, while others feature few or no transactions per year. For fisheries with very limited vessel/licence markets, valuations are based more on inference and anecdotal information than on hard data. This is reflected in the reported “confidence level” of each assessment.

As noted in prior reports, each year seems to feature less open-market transaction activity than the last. This is attributed to a number of factors, including: consolidation of licence/quota holdings, licence retirement programs, and poor performance in some of the commercial fisheries. Increasingly, uncovering valuation data and information is a challenge.

This report provides by-fishery analysis of current and historical licence, quota, lease, and vessel values. The findings of this report are offered with the objective to provide information across fisheries on a consistent basis. The report is designed to allow the user to gain a useful snapshot of the current situation and trends prevailing in each fishery.

The contractor cautions that valuations contained in this study, while reflective of March 31, 2012 licence, quota, and vessel values, should not provide the valuation rationale for any purchase/sale transactions that may be contemplated. Licence and quota values are extremely dynamic, changing dramatically and quickly as harvest volumes, ex-vessel prices, and supply/demand forces change. Valuations provided herein cannot replace the due diligence required to negotiate the “right” price for a fishing vessel, licence, or quota.

Summary: Year ending March 31, 2012

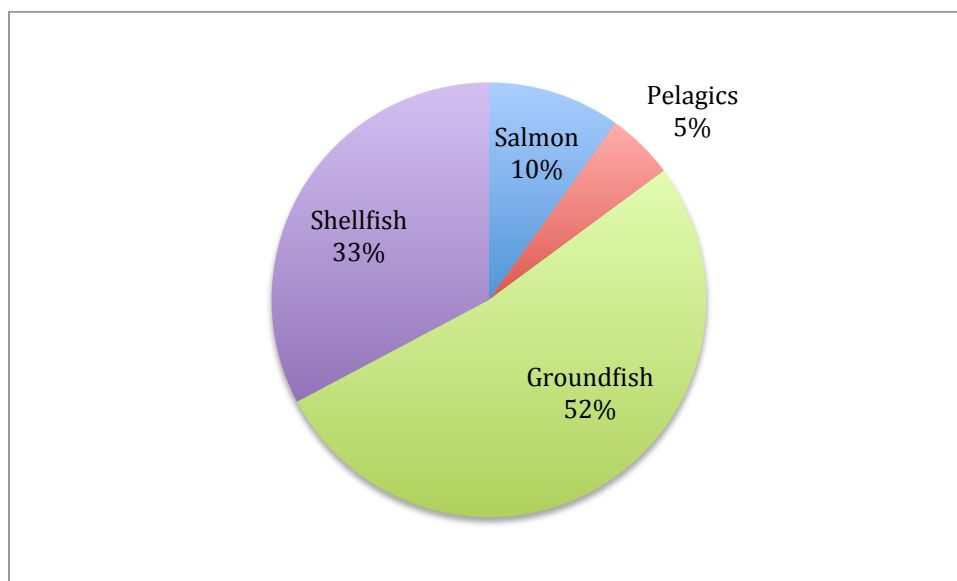
The market capitalization of commercial licences and quota in the BC fishery at March 31, 2012 is summarized as follows (excludes F licences and relinquished quota in the halibut and sablefish fisheries¹):

Fishery Grouping	Fishery	Total Licence & Quota Value (\$ millions)
Salmon	Seine	57.7
	Gillnet	46.7
	Troll	50.3
Pelagics	Herring – Roe Seine	27.4
	Herring – Roe Gillnet	37.2
	Herring - Spawn on Kelp	7.2
	Tuna	0.0
	Sardine	6.3
Groundfish	Halibut	346.5
	Sablefish	178.0
	Groundfish Trawl	244.9
	Rockfish Inside	1.5
	Rockfish Outside	23.0
	Lingcod Hook & Line	21.4
	Dogfish Hook & Line	4.2
Shellfish	Prawn	136.6
	Crab	136.6
	Shrimp	7.2
	Geoduck	184.6
	Sea Cucumber	42.5
	Red Sea Urchin	3.4
	Green Sea Urchin	1.2
	Euphausiid	0.5
Schedule II	Schedule II Species	3.5
Total		\$1,568

The break-down of licence and quota value by grouping is as follows:

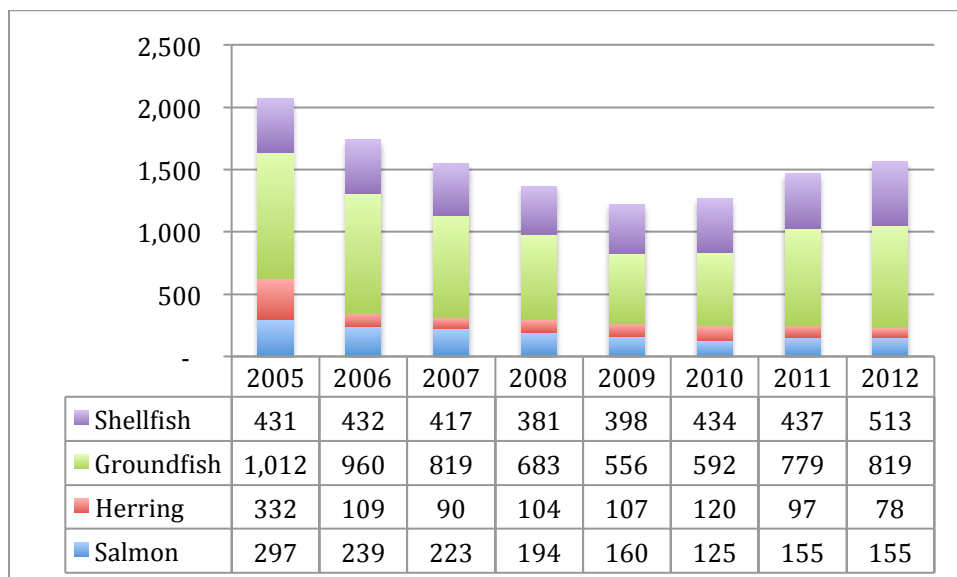
¹ The data reflects DFO licensing information at March 31, 2012 but may not reflect all license and quota relinquishments completed by that date. Additional relinquishments made after March 31, 2012 will be captured in subsequent valuation reports.

Market Value Breakdown for 2012 by Fishery Grouping



The aggregate value of Pacific commercial fishing licences and quotas rose marginally from prior-year levels, as shown in the following table.

All Fisheries – Aggregate Licence Value (\$millions)



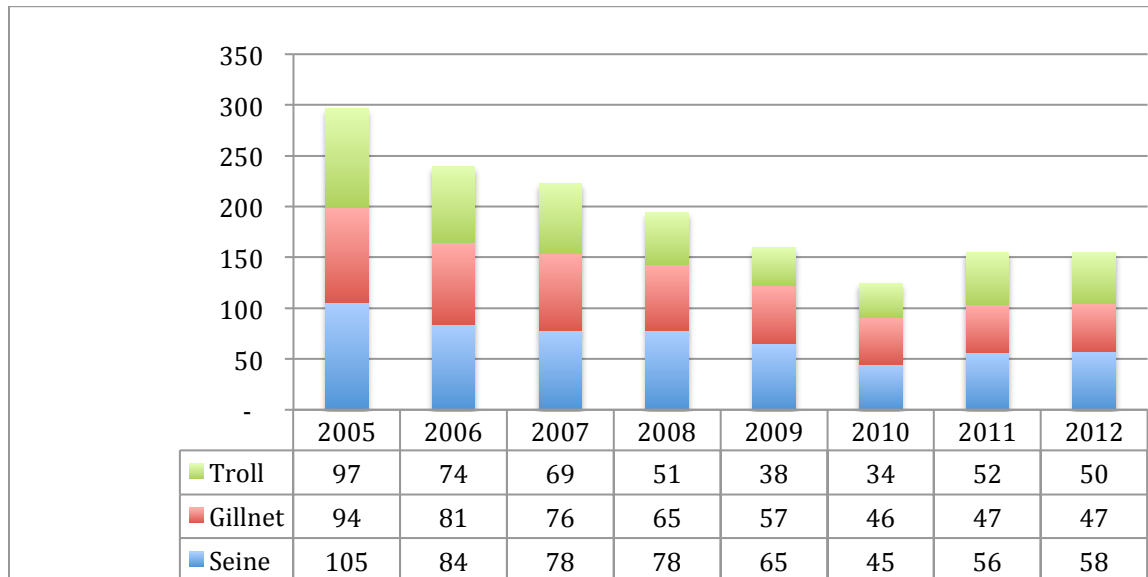
The growth seen over the past couple of years is in spite of the fact that the pool of commercial licences and quotas has diminished through retirements under the PICFI program; the program relinquished more than \$100 million in access over the last five years.

Further details for key fishery grouping are provided below. In all charts values are *not* adjusted for inflation; also, valuations exclude F-category licences and quota.

Salmon

Salmon remains a rather soft licence market; given limited fishing opportunities and poor financial returns, some participants are surprised that values have held to the extent that they have.

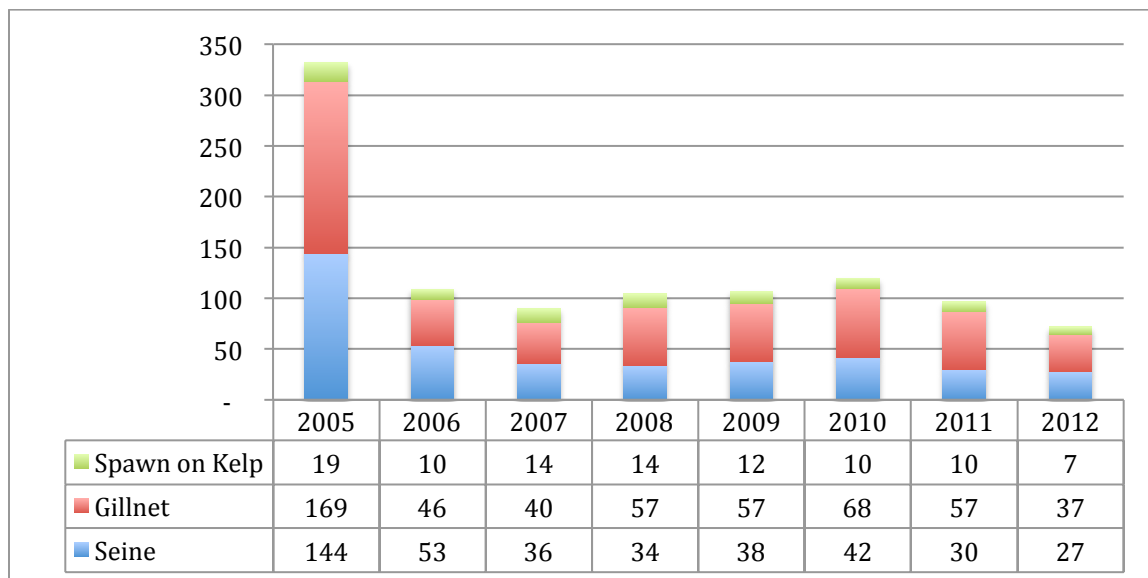
Aggregate Salmon Licence Value (\$ millions)



Herring

The 2012 herring season was very poor, particularly for the seine fleet. Optimism that market conditions in Japan could improve in 2013 is propping up licence values, albeit at low levels.

Aggregate Herring Licence Value (\$ millions)

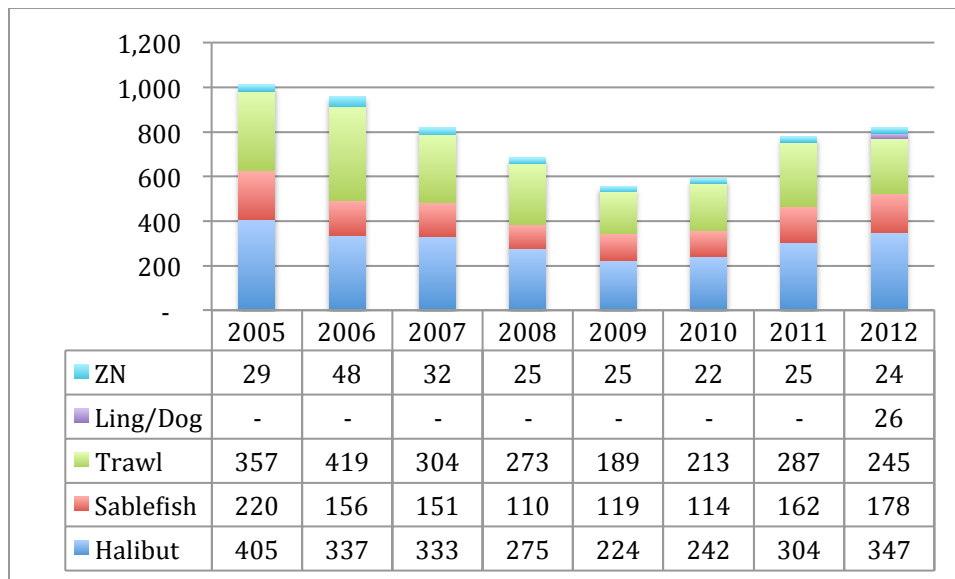


Groundfish

Values in the groundfish fishery generally firmed in 2012. In the trawl sector, there were a couple of major transactions, as two large firms have consolidated their positions in the fishery. Prices for halibut and sablefish quota again reached new highs.

Valuations are included this year for lingcod and dogfish quota.

Aggregate Groundfish Licence and Quota Value (\$ millions)

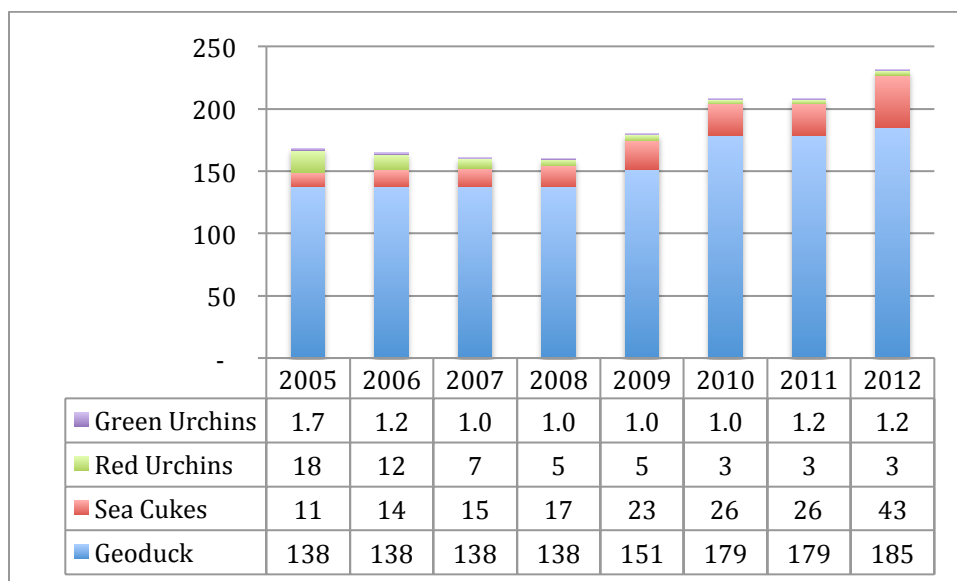


Shellfish

A new (pilot) licensing system was implemented in the geoduck fishery during the current year, with each of the 55 G licences now issued 10 quota blocks. The enhanced divisibility and separability is expected to improve the liquidity of the market.

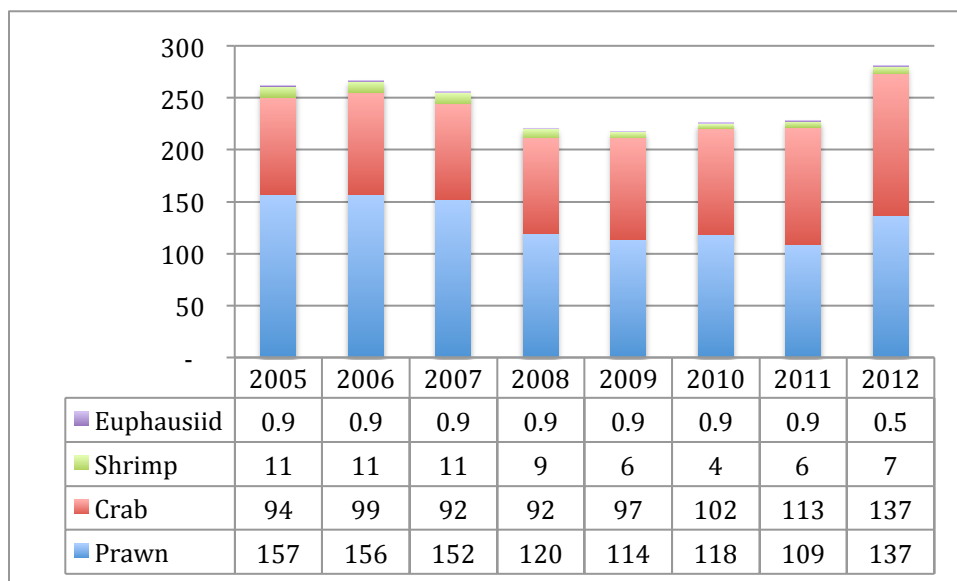
Sea cucumber asset values surged during the year, reflecting strong results and prospects for the fishery. Both sea urchin categories remained soft.

Shellfish Dive Fisheries – Aggregate Licence Value (\$ millions)



Crab and prawn licence values continued to escalate, reflecting good performance and the strong appeal of these fisheries amongst young, aggressive fishermen.

Shellfish Trap/Trawl Fisheries – Aggregate Licence Value (\$ millions)



Methodology

Valuations Performed

The following table shows the scope of work carried out in this report:

Fishery Grouping	Fishery	Gear	Valuation				
			Average Vessel Value	Average Licence Value		Quota Value	Lease Value
				Full Fee	Reduced Fee		
Salmon	Salmon	Seine	X	X	X		
	Salmon	Gillnet	X	X	X		
	Salmon	Troll	X	X	X		X
Pelagics	Herring - Roe	Seine	X	X	X		X
	Herring - Roe	Gillnet	X	X	X		X
	Herring - Spawn on Kelp			X			
	Tuna	Hook & Line		X			X
	Sardine	Seine		X			X
Groundfish	Halibut	Longline	X	X		X	X
	Sablefish	Longline/Trap	X	X		X	X
	Groundfish Trawl	Trawl	X	X		X	X
	Rockfish	Hook & Line	X	X			X
	Lingcod and Dogfish	Hook & Line				X	X
Shellfish	Prawn	Trap	X	X			X
	Crab	Trap	X	X			
	Shrimp	Trawl	X	X			
	Geoduck	Dive	X	X			X
	Sea Cucumber	Dive	X	X			X
	Red Sea Urchin	Dive	X	X			X
	Green Sea Urchin	Dive	X	X			X
	Euphausiid	Trawl	X	X			
Schedule II	Schedule II Species			X			

Note that partial valuations for the tuna, sardine, lingcod, and dogfish categories are being included in this years report.

Valuation Methodology

In order to efficiently and most-accurately assess licence and vessel values, stratification was used where appropriate. Stratification is a statistical approach whereby licences or vessels being valued are divided into groups having similar characteristics. An average value is then determined for each group rather than each vessel (or licence).

Licence/Quota Stratification & Valuation Criteria

Licence stratification is generally quite simple, as each licence within a fishery tends to have similar characteristics. Exceptions are fisheries such as salmon and roe herring, where Full-fee and Reduced-fee licence distinctions bring different values. For fisheries where quotas are separable from licences, quota valuations are provided on a per-pound basis.

The valuation criteria applied to licence/quota valuation will be noted for each fishery (eg. value per licence, per foot, per pound of quota).

Vessel Stratification

The vessel valuation approach used in this report is described as follows:

1. The number of licensed vessels in each commercial category is identified (source: Commercial Licence Eligibility Counts report).
2. Vessels are apportioned between “classic” and “modern” style.

Classic vessels are of older design (typically pre-1980’s), meaning they may have less beam, power, sophisticated fishing gear, refrigeration, fish-packing capacity, and creature comforts than a modern vessel. Wood is the predominant construction material, though some are built of materials like steel, fibreglass, and aluminium.

Modern vessels are deemed to be those incorporating non-wood material with progressive design and enhanced capabilities, such as those mentioned above (speed, power, refrigeration, capacity, etc.). A surge in vessel construction occurred through the 1980’s in the salmon and roe herring fleets. Prosperity in the crab, prawn, and dive fleets resulted in considerable new vessel construction through the early-mid 2000’s.
3. A range of values—low and high—is pegged for both classic and modern vessels.
4. A calculation is provided, showing the estimated make-up and valuation of vessels in the fishery, for both individual vessels, and the fleet in aggregate. The following sample table is populated for each fishery:

Fishery	# Vessels	Avg Vessel Value	Aggregate Value
Classic Style			
Modern Style			
Total/Average			

Note: For some fisheries, the number of vessels enumerated does not correspond to the number of licences indicated for the fishery. This discrepancy is sometimes due to licence stacking permitted in a fishery. It may also be due to the fact that some licences were not renewed or assigned to vessels at the March 31, 2012 valuation date. The number of vessels evaluated for each fishery is derived from commercial licensing data.

Vessel Stratification Intent

The vessel stratification approach used in this study reflects the absence of a current database on commercial vessel attributes (for instance year built and construction material). The intent of the current methodology is to provide a few values—for individual vessels and the fleet in

aggregate—for readers interested in assessing the approximate value of craft in a particular fishery.

Information Collection

This report follows a similar valuation methodology to that applied in prior reports. Valuations are based upon a variety of information, including:

- First-hand reports of specific transactions (“best” source);
- Anecdotal reports of general price levels or trends (expert opinion);
- Consideration of vessel and licence “listings” (e.g. brokerage information);
- Consideration of prevailing industry “fundamentals” (fishery landings, landed prices, market situation, etc.);
- Application of the contractor’s judgment.

The key source of information was interviews with industry participants, including fishermen, processing representatives, vessel / licence brokers, lawyers, and others close to a particular fishery.

Valuation Criteria

Each valuation furnished in the report represents a synthesis of the best information obtained from industry on transaction levels, and application of the contractor’s judgement in determining a going rate for licences and quota. Pegging a going rate often requires a high degree of judgement. For fisheries with a reasonable volume of trading activities, valuations are an attempt to encapsulate weighted average prices at the valuation date. For fisheries with little or no trading activity, valuations are merely estimates based upon anecdotal information, current fishery trends, and past price levels. The confidence level accompanying each valuation is linked to the depth and quality of information unearthed.

Valuation Trends

For each fishery, valuation trend graphs, including the current valuation along with those found in the four prior reports, are presented. Values in these graphs are in nominal terms (not adjusted for inflation).

Licensing Information

For each fishery evaluated in this report, a brief synopsis of the licensing system is provided in table format. Readers may require further information, which may be found in Integrated Fisheries Management Plans, or the Pacific Licensing web page. Links to these information sources:

- IFMP’s: <http://www.pac.dfo-mpo.gc.ca/fm-gp/ifmp-eng.htm>
- DFO Licensing: <http://www.pac.dfo-mpo.gc.ca/fm-gp/licence-permis/index-eng.htm>

SALMON: Salmon Seine

General Description

<i>Licence Designation</i>	AS
<i>Nature of Licence</i>	Vessel based – vessel owner may make annual application for issuance of licence
<i>Number of Commercial Licences (valued in this study)</i>	212
<i>No. of Communal Commercial Lic's (not valued in this study)</i>	64 (FAS designation – Party based)
<i>Licensing/Management Framework</i>	Area Licensing; vessel owner must designate one of two areas, north or south (A and B); periodic area re-selection (2006 was last re-selection). Stacking allowed; currently 108 Area A licences and 168 Area B (includes F licences).
<i>Additional Information</i>	Competitive fishery; occasional IVQ pilot programs. Licences have no associated quota. Vessel-based licence virtually precludes licence leasing. Reduced fee licences may only be held on a vessel where the vessel owner is an aboriginal individual. Vessel-based licence allows harvest of Schedule II species and transporting (packing).

Valuation Parameters

Valuations performed:	1. AS licence: full fee and reduced fee 2. Vessels
Basis for valuation:	3-5 open market transactions 2 PICFI relinquishments Anecdotal information
Confidence in valuation:	Moderate

Current Valuation

Licence Value at March 31, 2012

Category	# Licences	Value/ Licence (\$)	Total Value (\$)
Full Fee	197	275,000	54,175,000
Reduced Fee	15	235,000	3,525,000
All AS	212	272,170	57,700,000

Valuation Comments

Range of values between \$250,000 and \$325,000.

There is still a modest premium for longer licences.

Not much of a market for this licence category.

Some participants are surprised that AS licences maintain values at this level, given the poor recent returns from the fishery.

The prospect of permanent quota allocations may buoy values somewhat.

There is some leasing for F category AS licences; these deals tend to be based on a percentage of the landed value, with percentages ranging from 10-30%.

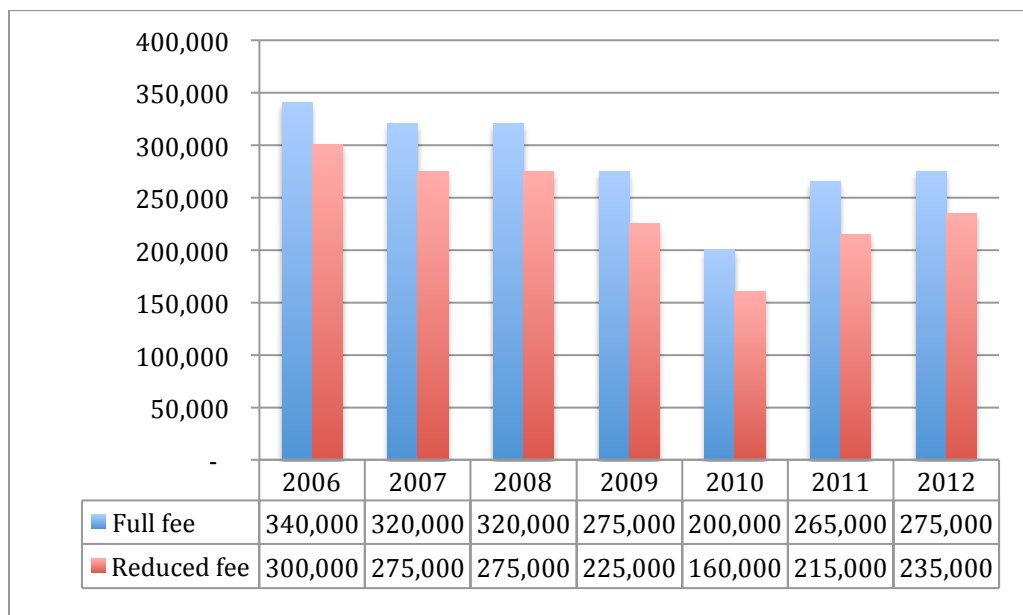
Vessel Value

Fleet composition is arrived at by using past data as a baseline. By nature, fleet vessel valuation is very imprecise and results should be used for general purposes only.

Salmon Seine	# Vessels	Avg Vessel Value (\$)	Aggregate Value (\$)
Classic Style	62	120,000	7,440,000
Modern Style	93	567,000	52,731,000
<i>Total</i>	155	388,200	60,171,000

Licensing Trends²

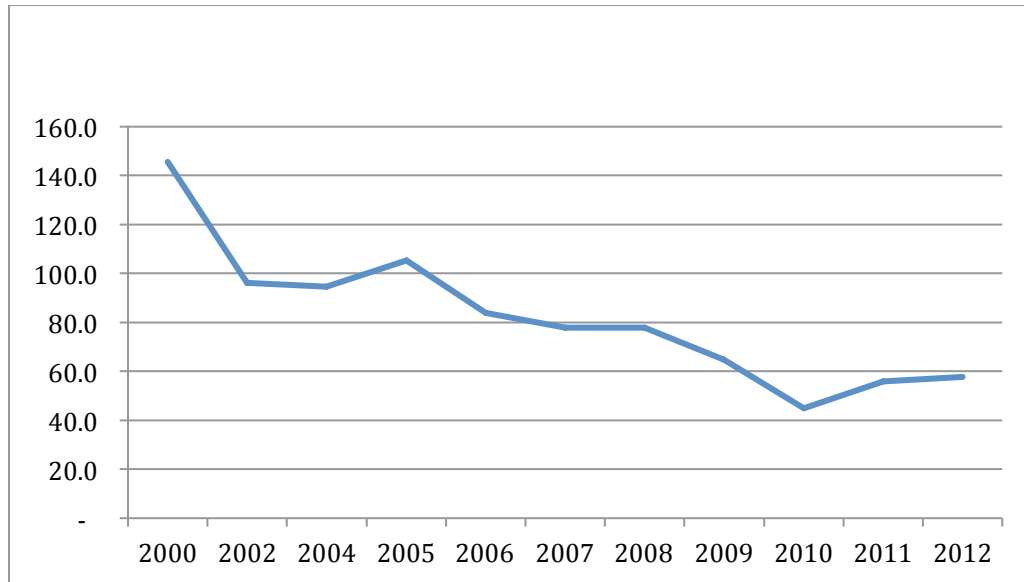
Recent AS Licence Valuations (\$)



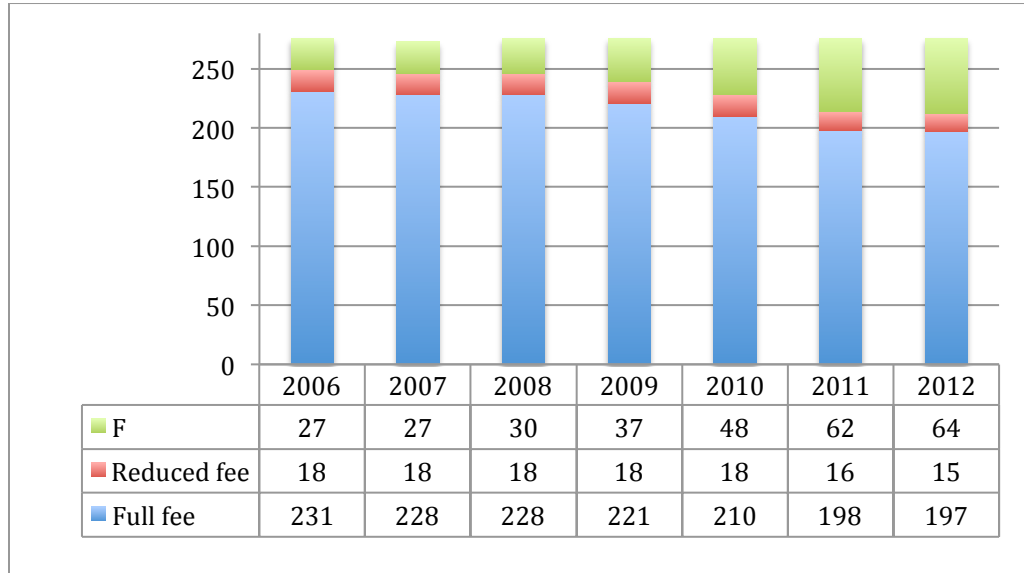
² Values in charts are in nominal terms (not adjusted for inflation)

Values have risen since the strong Fraser River sockeye return of 2010, even though the past two seasons have seen a return to lower catches and landed values.

Aggregate Value of AS Licences (\$millions by year)

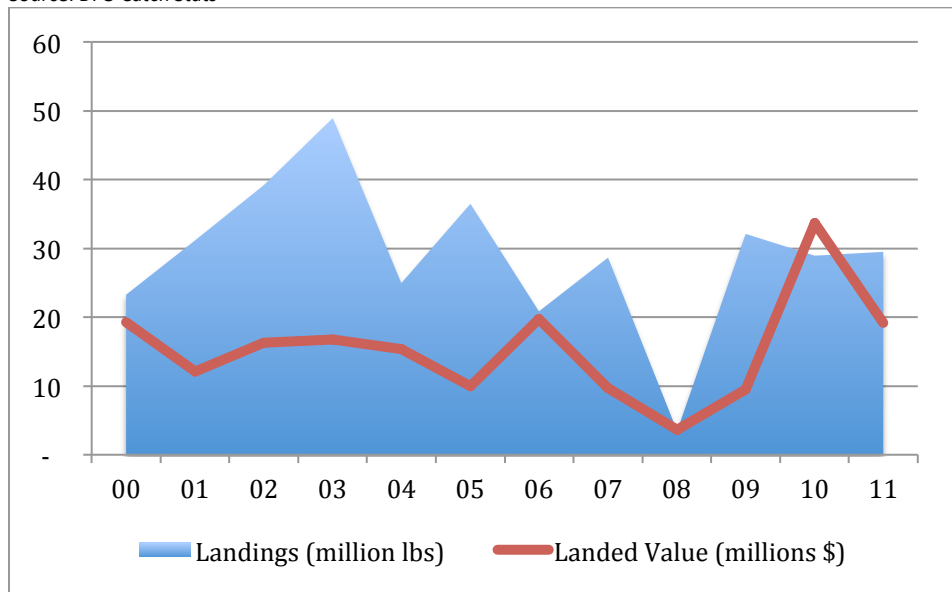


AS Licence Counts by Category



Seine Salmon Landings & Landed Value Trend

Source: DFO Catch Stats



Outlook

Since the 2010 season, which featured a large Fraser sockeye run, catches and landed values for the commercial salmon fishery have declined. The 2012 fishery was also poor.

Based on returns from fishing, many participants feel that licence values in this fishery should be lower. Expectations (speculation) regarding permanent quota allocations seem to be supporting values.

For the foreseeable future, the seine salmon fishery looks to remain an opportunistic fishery, with occasional windfall catches, rather than a consistently profitable one.

SALMON: Salmon Gillnet

General Description

<i>Licence Designation</i>	AG
<i>Nature of Licence</i>	Vessel based – vessel owner may make annual application for issuance of licence
<i>Number of Commercial Licences (valued in this study)</i>	875
<i>No. of Communal Commercial Lic's (not valued in this study)</i>	277 (FAG designation, Party-based)
<i>Licensing/Management Framework</i>	Area Licensing; vessel owner must designate one of 3 areas: North (C), Johnstone St/Barclay Sound (D), or Fraser River (E); periodic area reselection (2006 was last re-selection). Stacking allowed; currently 654 Area C, 362 Area D, and 390 Area E (includes FAG and NAG licences)
<i>Additional Information</i>	Competitive fishery. An additional 254 personal licences (NAG designation) are held by the Northern Native Fishing Corporation. Vessel-based licence virtually precludes licence leasing, except in FAG category. Reduced fee licences may only be held on a vessel where the vessel owner is an aboriginal individual. Vessel-based licence allows harvest of Schedule II species and transporting (packing).

Valuation Parameters

Valuations performed:	1. AG licence, full fee and reduced fee 2. Vessels
Basis for valuation:	> 10 open market transactions 24 PICFI retirements Anecdotal information
Confidence in valuation:	Moderate

Current Valuation

Licence Value at March 31, 2012

Category	# Licences	Value/ Licence (\$)	Total Value (\$)
Full Fee	737	55,000	40,535,000
Reduced Fee	138	45,000	6,210,000
All AG	875	53,423	46,745,000

Valuation Comments

Values range from \$40,000 (reduced fee) to \$55,000.

\$55,000 is deemed to be the prevailing rate at the valuation date, but values had eased to about \$50,000 by fall 2012.

A price distinction between fishing areas was not apparent this year.

With a growing pool of F-category AG licences, which are party based licences, there is an increasing amount of leasing of these licences. Some of the First Nations communities or corporations lease FAG licences to community members at advantageous price levels, while others are leased outside of communities at market rates.

Lease rates for FAG licences range from \$500 to \$2,500.

Some NAG licences (Northern Native Fishing Corporation) were leased to in-river Skeena watershed First Nations, to facilitate Economic Opportunity fisheries, for about \$1,900/licence.

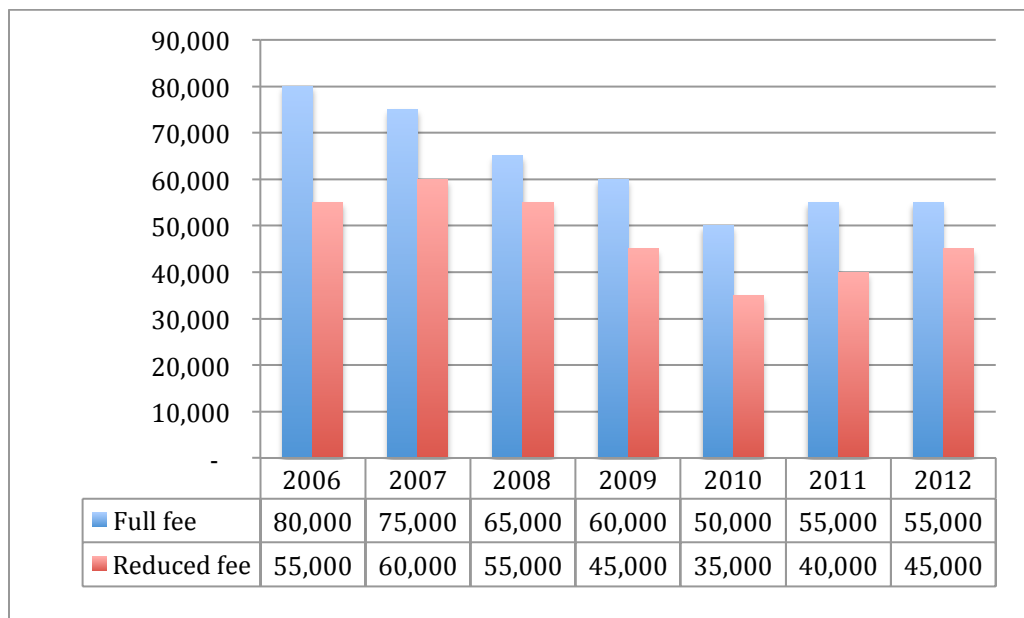
Vessel Value

Fleet composition is arrived at by using past data as a baseline. By nature, fleet vessel valuation is very imprecise and results should be used for general purposes only.

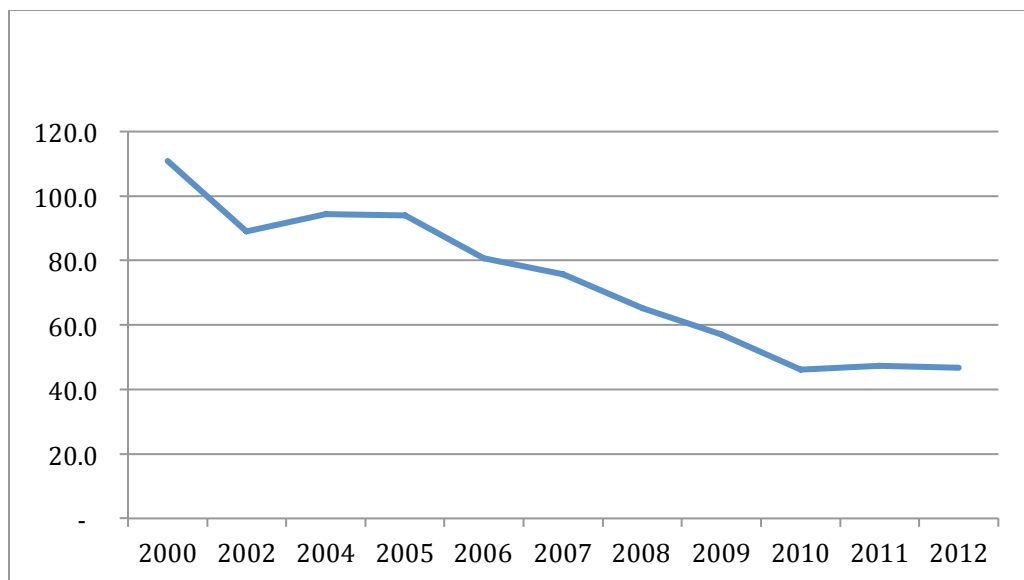
Salmon Gillnet	# Vessels	Avg Vessel Value (\$)	Aggregate Value (\$)
Classic Style	522	38,000	19,836,000
Modern Style	348	125,000	43,500,000
<i>Total</i>	870	72,800	63,336,000

Licensing Trends³

Recent AG Licence Valuations (\$)

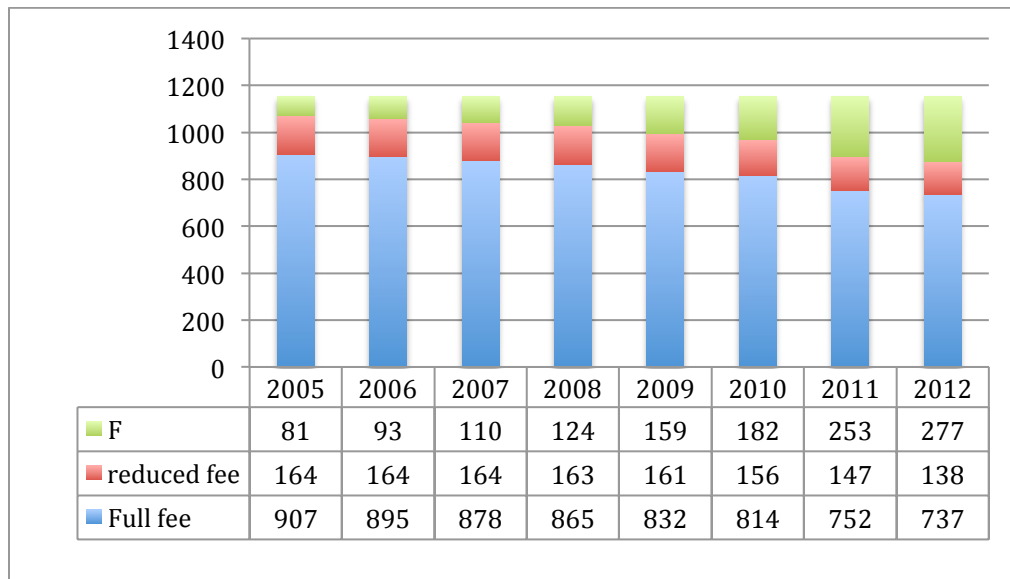


Aggregate Value of AG Licences (\$ millions by year)



³ Values in charts are in nominal terms (not adjusted for inflation)

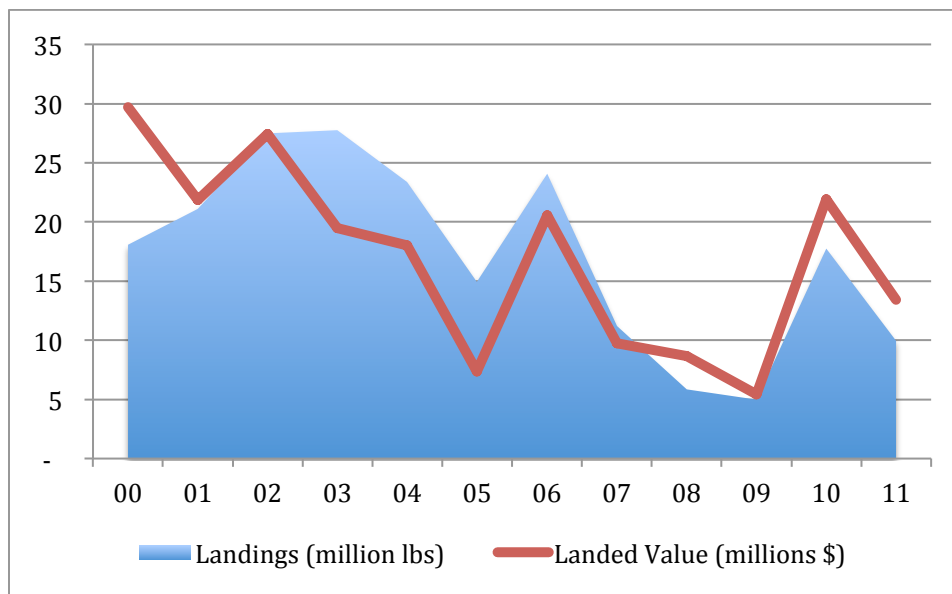
AG Licence Counts by Category



The above table does not include 254 Northern Native Fishing Corporation (NNFC) licences (NAG designation).

Gillnet Salmon Landings & Landed Value Trends

Source: DFO Catch Stats



Outlook

Since the 2010 season, which featured a large Fraser sockeye run, catches and landed values for the commercial salmon fishery have declined. The 2012 fishery was also poor.

For the foreseeable future, the gillnet salmon fishery looks to remain an opportunistic fishery, with occasional windfall catches, rather than a consistently profitable one.

SALMON: Salmon Troll

General Description

<i>Licence Designation</i>	AT
<i>Nature of Licence</i>	Vessel based – vessel owner may make annual application for issuance of licence
<i>Number of Commercial Licences (valued in this study)</i>	459
<i>No. of Communal Commercial Lic's (not valued in this study)</i>	71 (FAT designation, Party-based)
<i>Licensing/Management Framework</i>	Area Licensing; vessel owner must designate one of 3 areas: North (F), West Coast Vancouver Island (G), and Georgia Strait (H); periodic area re-selection allowed. Stacking allowed; currently 283 Area F, 165 Area G, 90 Area H (includes FAT licences).
<i>Additional Information</i>	Competitive fishery, except area F (IVQ). Vessel-based licence virtually precludes licence leasing. Reduced fee licences may only be held on a vessel where the vessel owner is an aboriginal individual. Vessel-based licence allows harvest of Schedule II species and transporting (packing).

Valuation Parameters

Valuations performed:	1. AT licence, full fee and reduced fee 2. Vessels
Basis for valuation:	5-10 open market transactions 7 PICFI retirements 8 Mitigation Fund retirements Anecdotal information
Confidence in valuation:	Moderate

Current Valuation

Licence Value at March 31, 2012

Category	# Licences	Value/ Licence (\$)	Total Value (\$)
Full Fee	441	110,000	48,510,000
Reduced Fee	18	100,000	1,800,000
All AT	459	109,608	50,310,000

Valuation Comments

Values range from \$85,000 to \$120,000

Values have remained quite steady for the last two years.

The anticipated surge in values due to the USA government-funded “Mitigation” program has not materialized. The Mitigation fund has been “stingy” in the view of some BC participants, paying rates that are barely on par with those on the open market.

It appears that the Mitigation Fund has retired 8 licences in the past year.

There does not appear to be a discernable difference in values for troll licences in the three fishing areas, since there are periodic opportunities to change areas.

Area F (north coast), which operates on an individual vessel quota system, features leasing of chinook quota for \$8-12 per fish, with the average somewhat above \$10.

Other than Area F IVQs, there was little evidence of leasing for F category AT licences during the period.

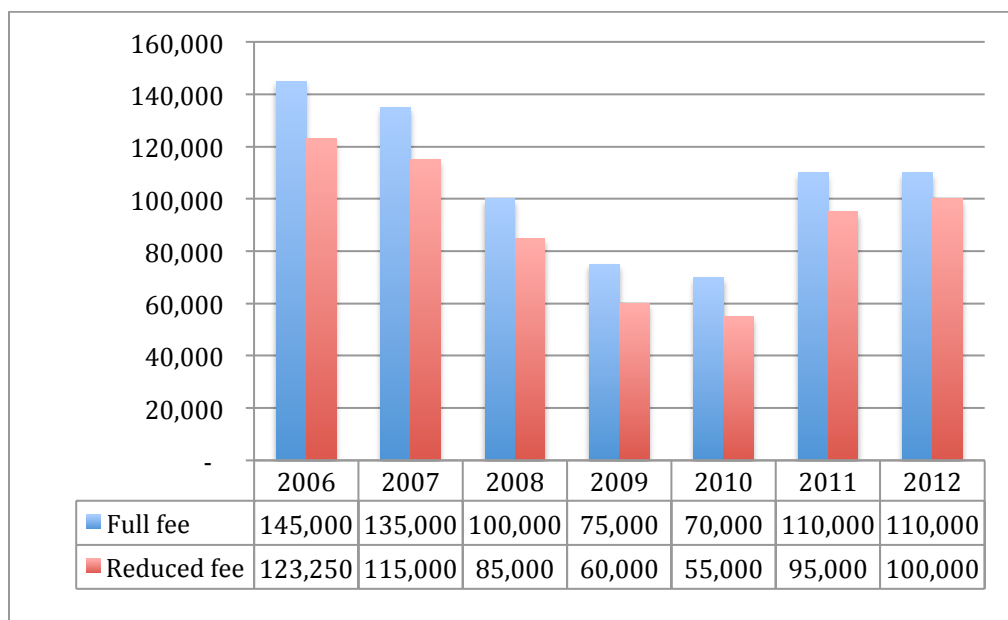
Vessel Value

Fleet composition is arrived at by using past data as a baseline. By nature, fleet vessel valuation is very imprecise and results should be used for general purposes only.

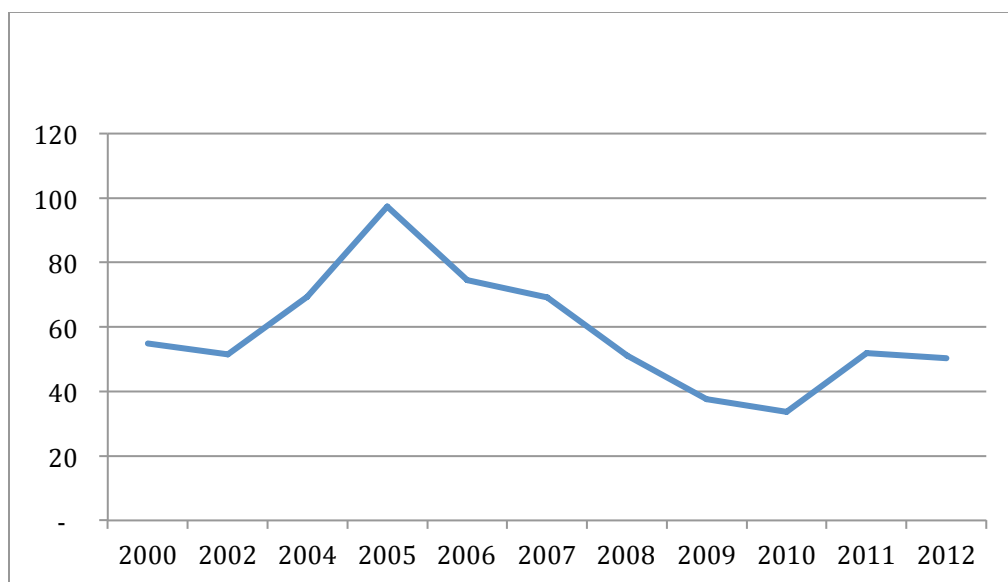
Salmon Troll	# Vessels	Avg Vessel Value (\$)	Aggregate Value (\$)
Classic Style	287	61,000	17,507,000
Modern Style	123	188,000	23,124,000
<i>Total</i>	410	99,100	40,631,000

Licensing Trends⁴

Recent AT Licence Valuations (\$)

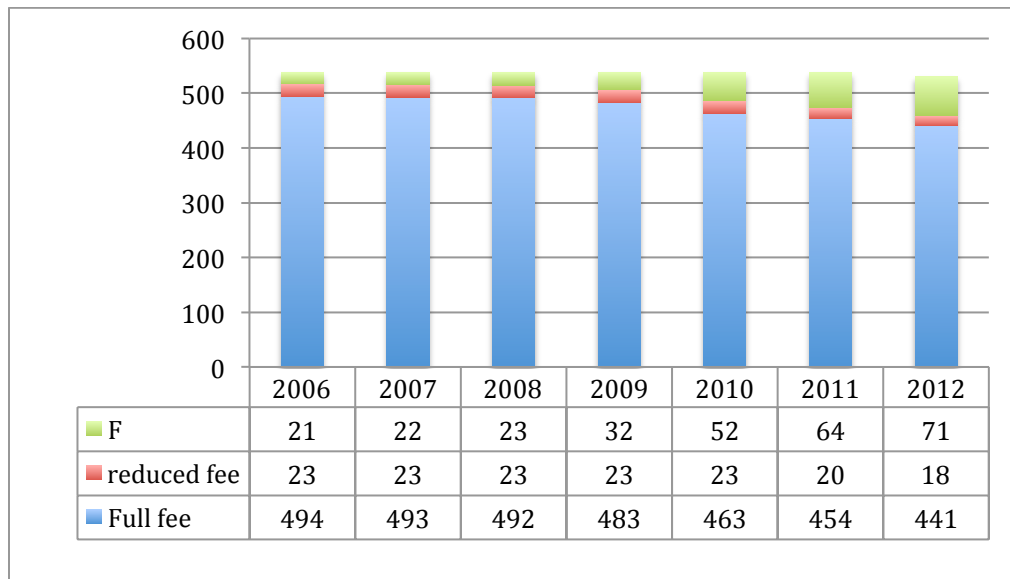


Aggregate Value of AT Licences (\$ millions by year)



⁴ Values in charts are in nominal terms (not adjusted for inflation)

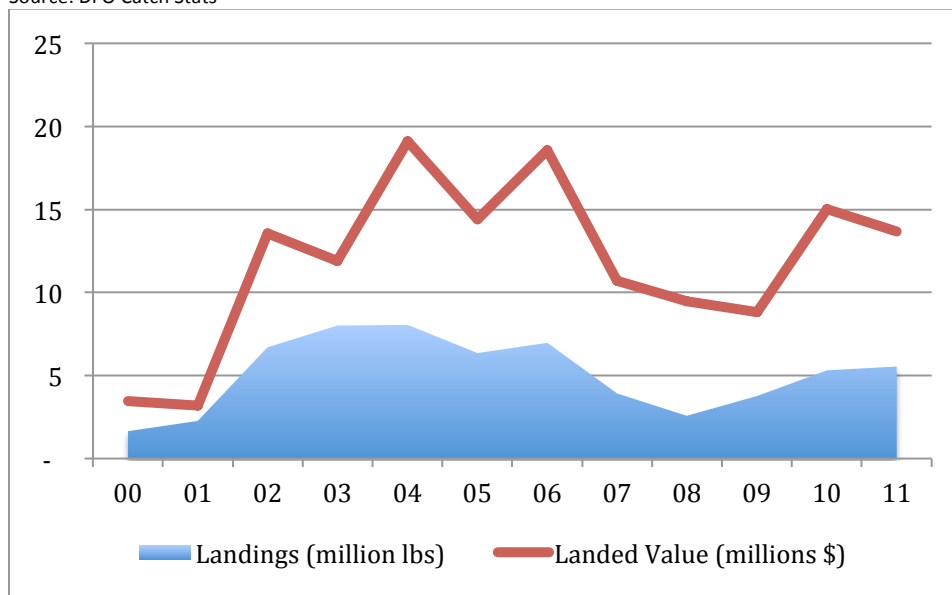
AT Licence Counts by Category



Note that the total number of AT licences has declined from 538 to 530, presumably due to retirements by the Mitigation Fund.

Troll Salmon Landings & Landed Value Trends

Source: DFO Catch Stats



Outlook

The troll fishery tends to be somewhat more stable than the net fisheries.

The troll fishery receives the bulk of commercial Chinook and coho allocations.

PELAGICS: Roe Herring Seine

General Description

<i>Licence Designation</i>	HS
<i>Nature of Licence</i>	Party based – individual, corporation, or band may make annual application for issuance of licence
<i>Number of Commercial Licences (valued in this study)</i>	245
<i>No. of Communal Commercial Lic's (not valued in this study)</i>	7 (FHS designation)
<i>Licensing/Management Framework</i>	Area Licensing – holder annually selects a fishing area. Pool fishery – licensed vessels are organized into pools in order to avoid quota overages; each licence in a given area receives the same entitlement of fish. Two licences per vessel allowed (three or four in special circumstances). Minimum of 8 licences per pool.
<i>Additional Information</i>	Active lease market for licences. There are five stock management areas: QCI, North, Central, WCVI, and Strait of Georgia.

Valuation Parameters

Valuations performed:	1. HS licence, full fee and reduced fee 2. Annual lease rate 3. Vessels
Basis for valuation:	< 3 open market transactions 2 PICFI retirements Anecdotal information
Confidence in valuation:	Low - Moderate

Current Valuation

Licence Value at March 31, 2012

Category	# Licences	Value/ Licence (\$)	Total Value (\$)
Full Fee	195	115,000	22,425,000
Reduced Fee	50	100,000	5,000,000
All HS	245	111,939	27,425,000

Valuation Comments

HS licence values remain soft.

Estimates of value range from \$100,000 to \$150,000.

Values are influenced by the very poor results in this fishery over the last couple of seasons.

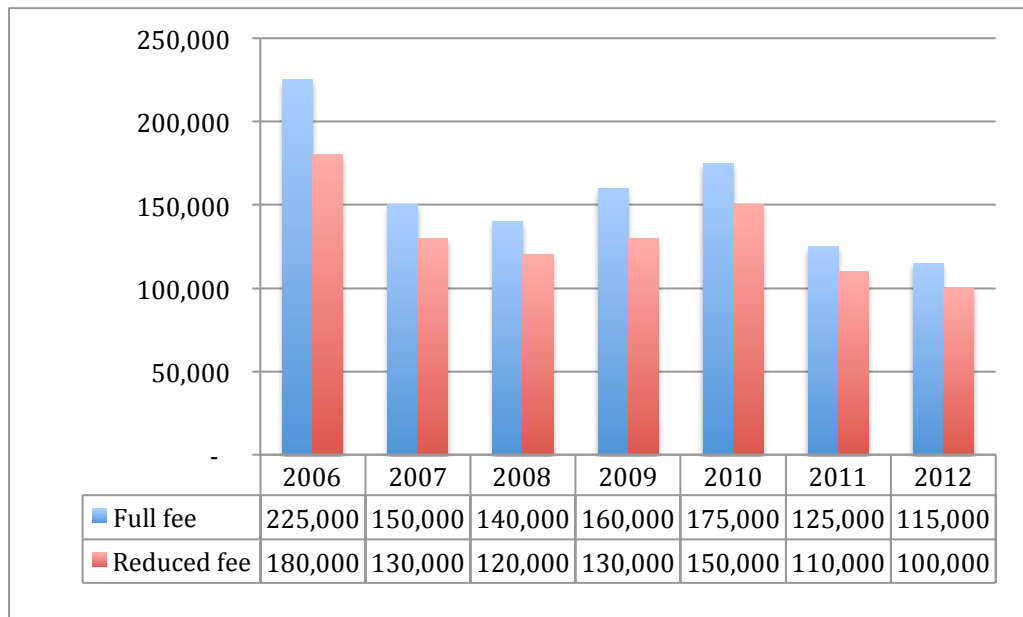
Vessel Value

Fleet composition is arrived at by using past data as a baseline. By nature, fleet vessel valuation is very imprecise and results should be used for general purposes only.

Herring Seine	# Vessels	Avg Vessel Value (\$)	Aggregate Value (\$)
Classic Style	35	175,000	6,125,000
Modern Style	105	667,000	70,035,000
<i>Total</i>	140	544,000	76,160,000

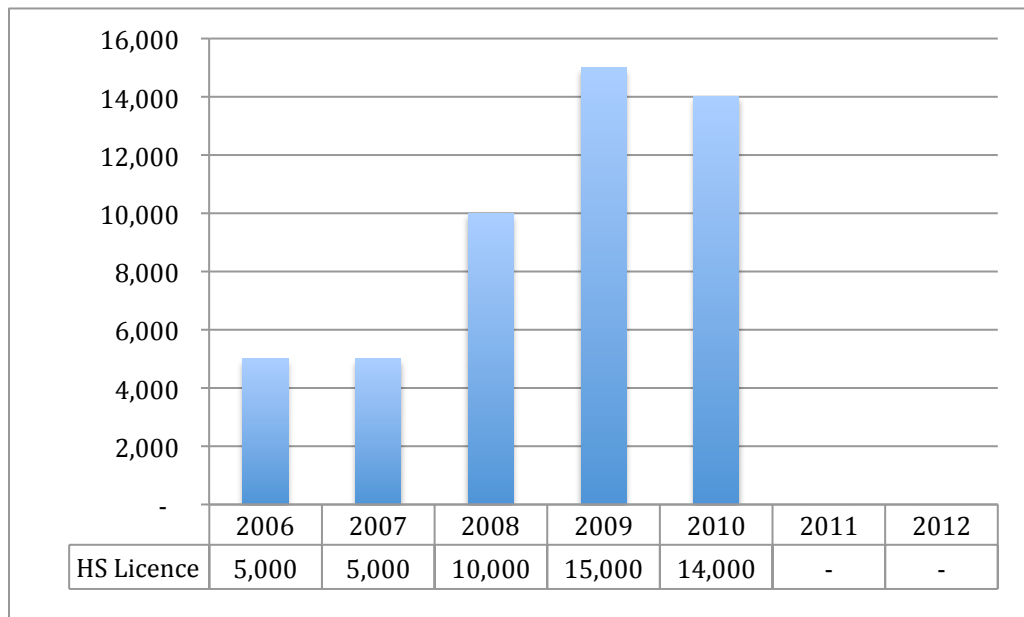
Licensing Trends⁵

Recent HS Licence Valuations (\$)



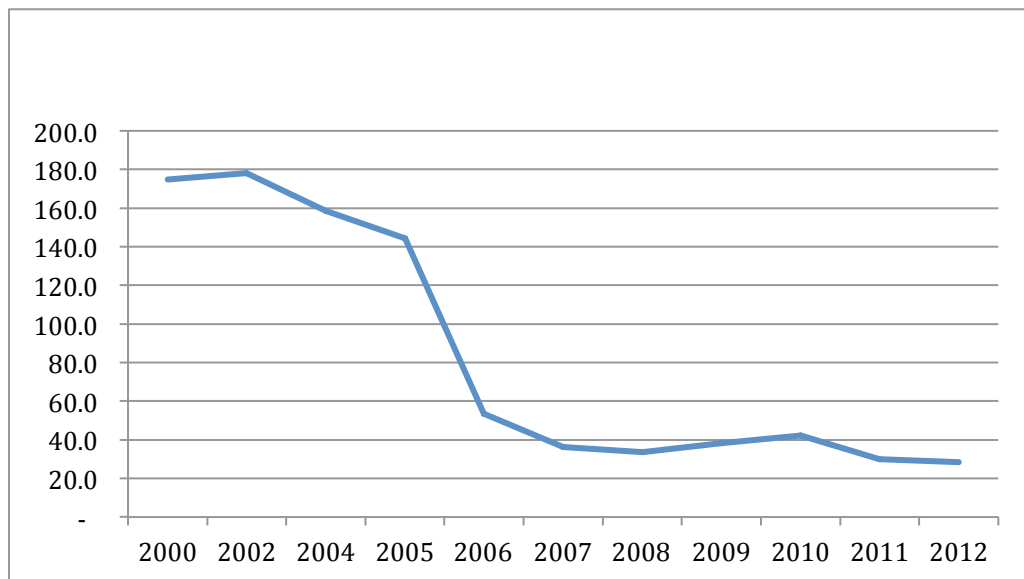
⁵ Values in charts are in nominal terms (not adjusted for inflation)

Recent HS Licence Lease Rates (\$)

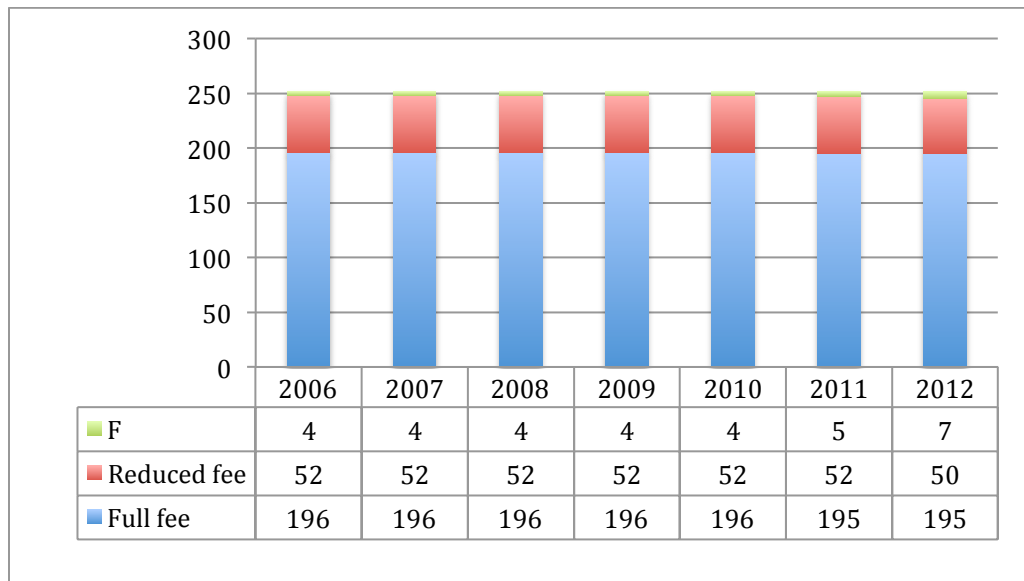


HS licences have had virtually no lease value for the past two seasons. Lessors typically pay only the DFO licence fees.

Aggregate Value of HS Licences (\$ millions by year)

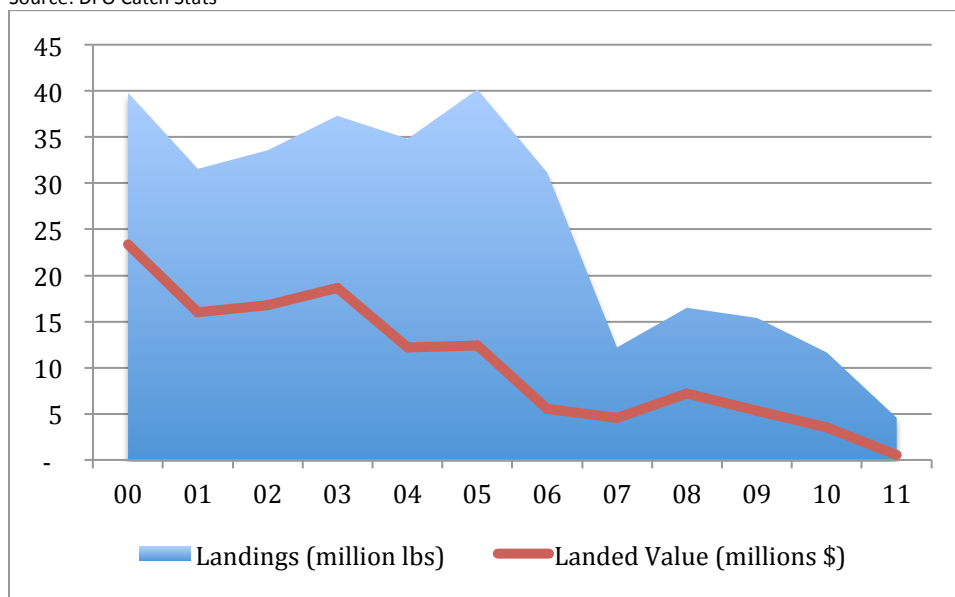


HS Licence Counts by Category



Seine Roe Herring Landings & Landed Value Trends

Source: DFO Catch Stats



Outlook

Despite recent poor results, there is some optimism that 2013 could be a better season, since catches in the 2012 Alaskan fishery were below par, and the backlog of product inventory in Japan has eased.

The “catch-22” in the roe herring fishery is that optimism for next season often leads to an increase in lease rates, which in turn reduces profits. This has been a pattern repeated over the past several years.

Industry members feel that HS licence fees (\$3,980 for full-fee) are out of step with the dismal economics of the fishery, and need to be reduced to enhance viability.

Available harvest volumes have not been utilized by the roe herring fishery in recent years. This year, the food & bait fishery featured a substantially enhanced quota. Participants are discussing the future use of herring stocks.

PELAGICS: Roe Herring Gillnet

General Description

<i>Licence Designation</i>	HG
<i>Nature of Licence</i>	Party based – individual, corporation, or band may make annual application for issuance of licence
<i>Number of Commercial Licences (valued in this study)</i>	1101
<i>No. of Communal Commercial Lic's (not valued in this study)</i>	167 (FH) designation
<i>Licensing/Management Framework</i>	Area Licensing – holder annually selects a fishing area. Pool fishery – organized into pools in order to avoid quota overages; each licence in a given area receives the same entitlement of fish. Minimum of 4 licences per pool.
<i>Additional Information</i>	Active lease market for licences. There are five stock management areas: QCI, North, Central, WCVI, and Strait of Georgia.

Valuation Parameters

Valuations performed:	1. HG licence: full fee and reduced fee 2. Annual lease rate 3. Vessels
Basis for valuation:	10 open market transactions 95 PICFI retirements Anecdotal information
Confidence in valuation:	Moderate

Current Valuation

Licence Value at March 31, 2012

Category	# Licences	Value/ Licence (\$)	Total Value (\$)
Full Fee	824	35,000	28,840,000
Reduced Fee	277	30,000	8,310,000
All HG	1101	33,742	37,150,000

Valuation Comments

Values around the March 31, 2012 valuation date were in the \$30,000 to \$35,000 range.

Through the summer and into the fall of 2012 values have risen to the \$40,000 to \$45,000 range.

PICFI was very active during the period; HG licences were highly affordable in relation to other categories of licence.

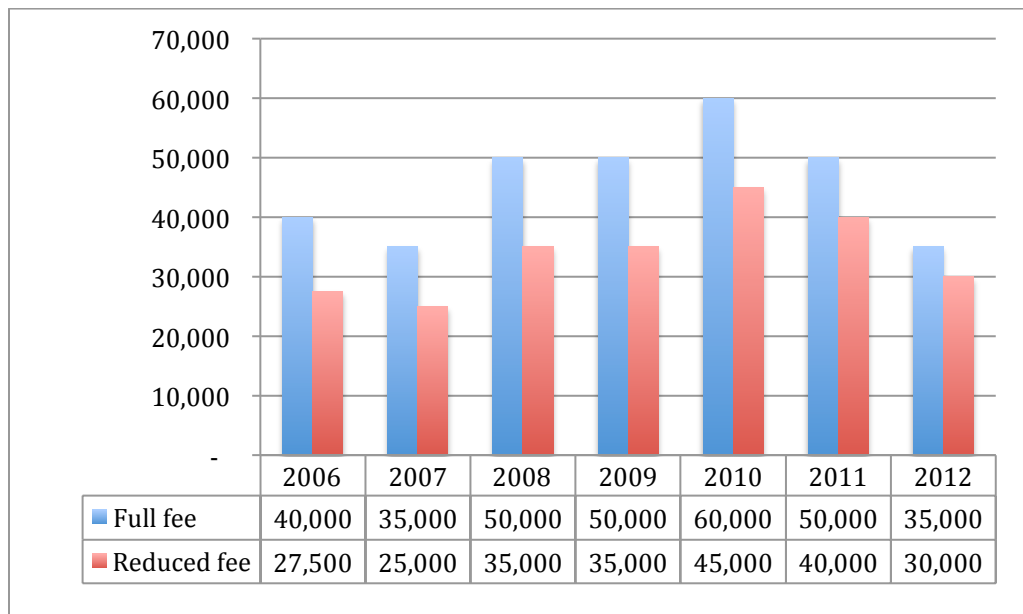
Vessel Value

Fleet composition is arrived at by using past data as a baseline. By nature, fleet vessel valuation is very imprecise and results should be used for general purposes only. The following vessel counts are estimates only, as the actual number of licensed vessels is not tracked by DFO.

Herring Gillnet	# Vessels	Avg Vessel Value (\$)	Aggregate Value (\$)
Classic Style	90	38,000	3,420,000
Modern Style	210	132,000	27,720,000
<i>Total</i>	300	103,800	31,140,000

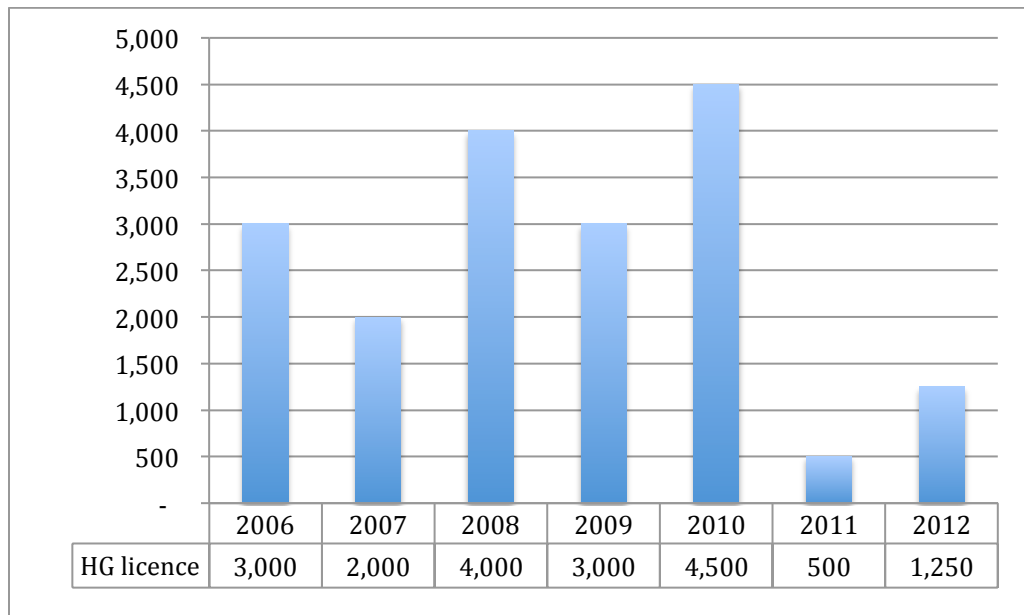
Licensing Trends⁶

Recent HG Licence Valuations (\$)



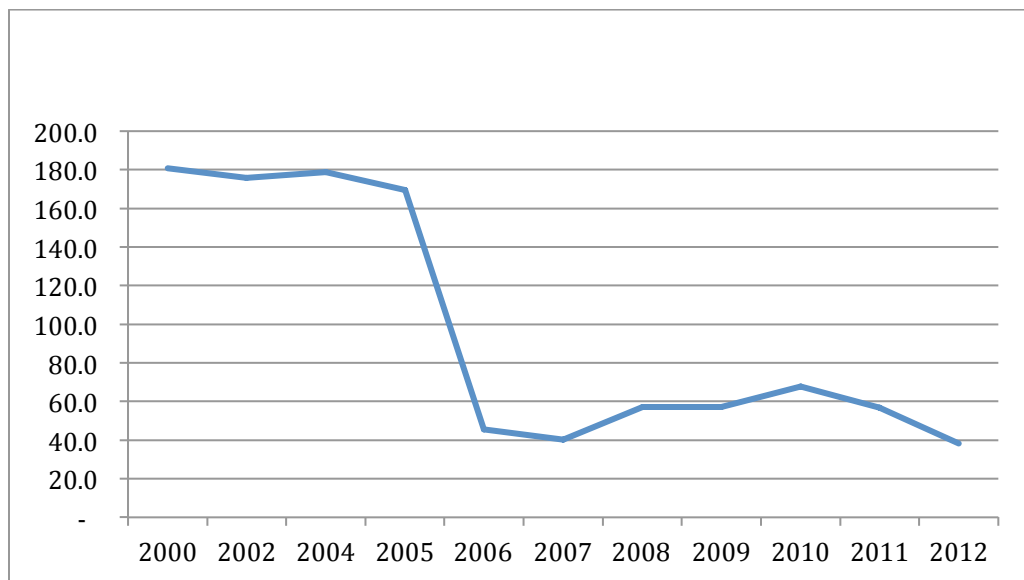
⁶ Values in charts are in nominal terms (not adjusted for inflation)

Recent HG Licence Lease Rates (\$)

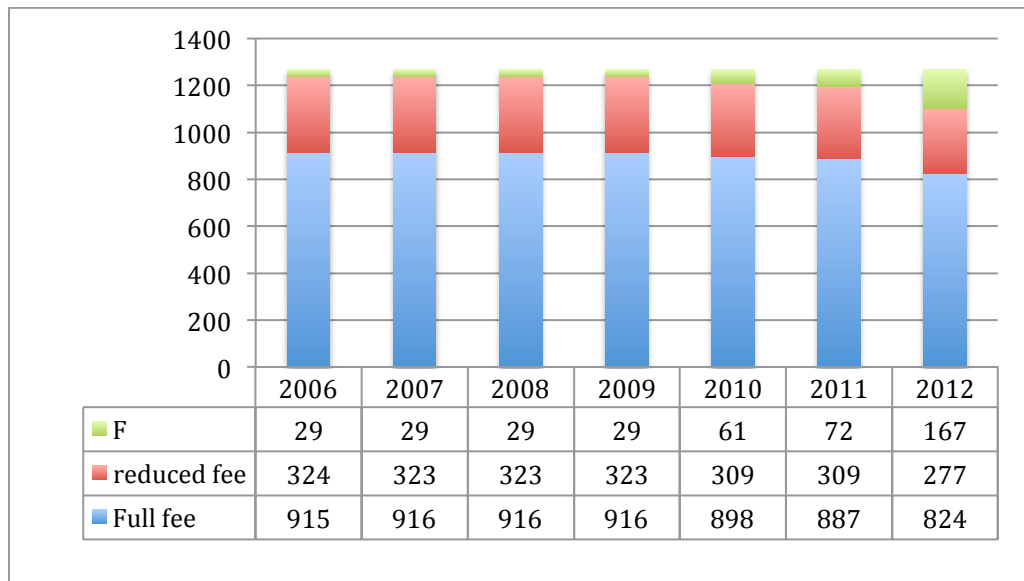


Lease rates are on a modest uptick. There is some expectation that rates will rise next year due to speculation on the Japanese roe herring market.

Aggregate Value of HG Licences (\$ millions by year)



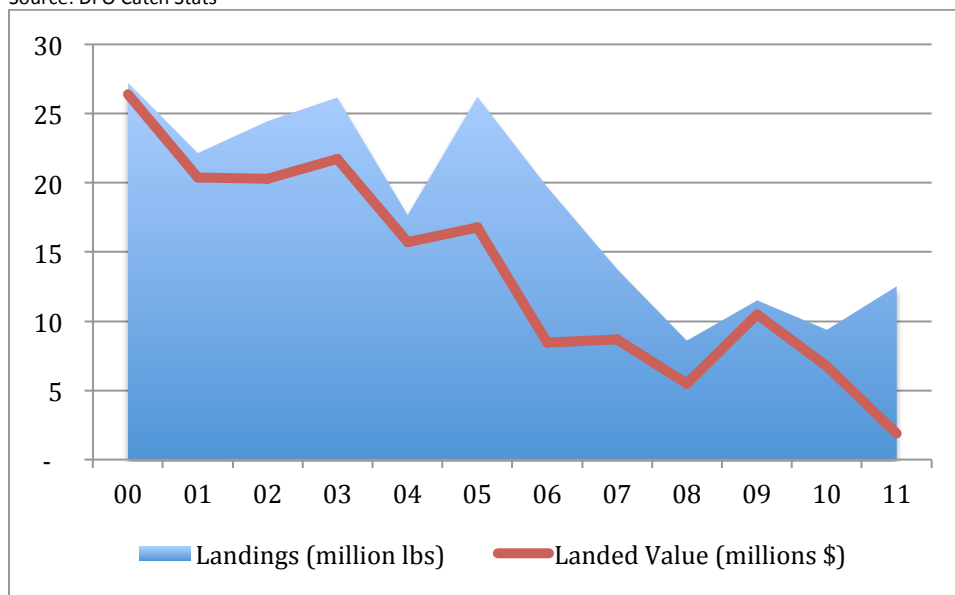
Licence Counts by Category



The number of retirements by PICFI was very high for the period (95 licences converted to F-category).

Gillnet Roe Herring Landings & Landed Value Trends

Source: DFO Catch Stats



Outlook

Despite recent poor results, there is some optimism that 2013 could be a better season, since catches in the 2012 Alaskan fishery were below par, and the backlog of product inventory in Japan has eased.

The “catch-22” in the roe herring fishery is that optimism for next season often leads to an increase in lease rates, which in turn reduces profits. This has been a pattern repeated over the past several years.

PELAGICS: Herring Spawn on Kelp

General Description

<i>Licence Designation</i>	J
<i>Nature of Licence</i>	Party based – individual, corporation, or band may make annual application for issuance of licence
<i>Number of Commercial Licences (valued in this study)</i>	36
<i>No. of Communal Commercial Lic's (not valued in this study)</i>	3 (FJ designation) An additional 7 FJ licences are issued annually to the Heiltsuk.
<i>Licensing/Management Framework</i>	Quota system – each J licence entitled to harvest 16,000 lbs (8 short tons) of product (FJ's may have a different entitlement). Licences are not technically transferable, but are effected through long term leases
<i>Additional Information</i>	Each licence is associated with a particular operating area; licences must be operated in that area Valuation is extremely imprecise, since there are no recognized transactions.

Valuation Parameters

Valuations performed:	J licence
Basis for valuation:	No transactions Anecdotal information
Confidence in valuation:	Very Low

Current Valuation

Licence Value at March 31, 2012

Category	# Licences	Value/ Licence(\$)	Total Value (\$)
J Licences	36	200,000	7,200,000

Valuation Comments

No known transactions during the period. Transactions are difficult because the licences are essentially non-transferable.

Estimates of licence value range from \$175,000 to \$200,000.

The current period valuation, pegged at \$200,000, continues a downward valuation trend over the last several years.

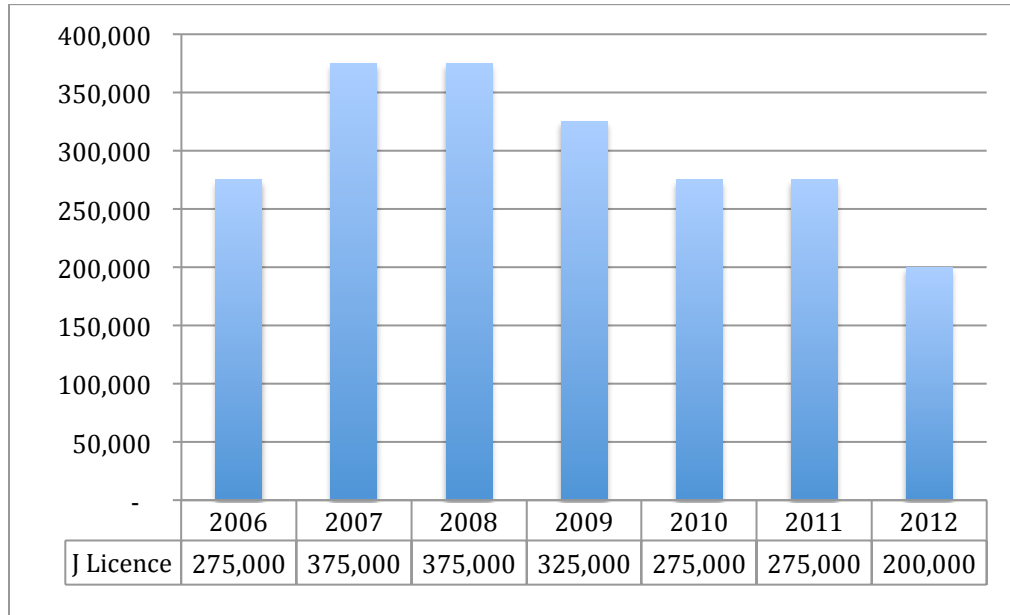
Enthusiasm for the fishery is limited, since operating costs are high relative to expected revenues.

Vessel Value

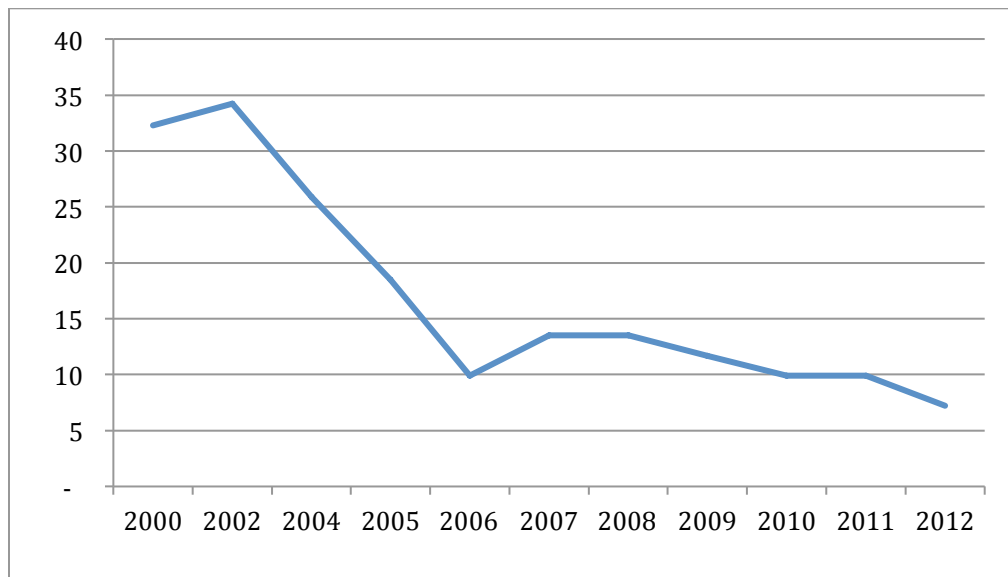
Not valued. There is no single vessel type associated with the spawn on kelp fishery, nor are licences assigned to a vessel.

Licensing Trends⁷

Recent J Licence Valuations (\$)



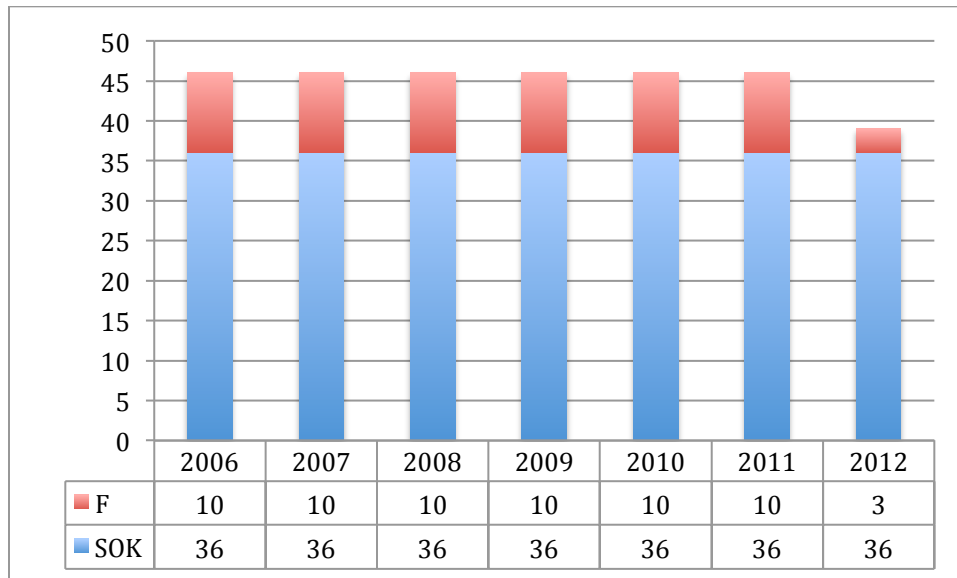
Aggregate Value of J Licences (\$ millions by year)



⁷ Values in charts are in nominal terms (not adjusted for inflation)

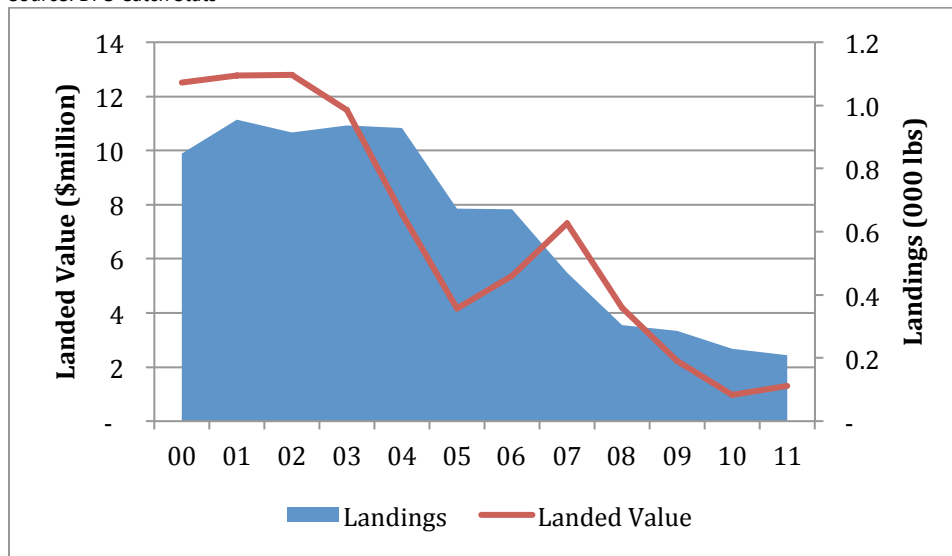
The sharp decline in J licence capitalization mirrors that seen in the roe herring fisheries.

J Licence Counts by Category



Spawn on Kelp Landings & Landed Value Trends

Source: DFO Catch Stats



Outlook

The economics of the fishery are challenging, with operating costs high relative to expected revenues.

Selling prices for SOK producers were reportedly in the \$7.00 to \$11.00 per pound range, with an average of about \$9.00 per pound.

Operating results vary by SOK operating location: some operations with abundant herring stocks and good quality product are performing adequately, while many others are opting to not-operate.

The prospects for this fishery remain challenging.

PELAGICS: Tuna and Sardine

Two fisheries that now feature “permanent” licence categories that trade on the open market are Tuna and Sardine. Current year partial valuations are provided for these fisheries:

Tuna (Category USA 68)

Valuation Parameters

Valuations performed:	Licence
Basis for valuation:	Anecdotal information
Confidence in valuation:	Very low (no valuation possible)

Current Valuation

Licence Value at March 31, 2012

Category	# Licences	Value/ Licence (\$)	Total Value (\$)
USA 68	110	n/a	n/a

Valuation Comments

The entire USA68 licence regime is currently in limbo because the USA refused to extend the treaty rights of Canadian license holders to fish in USA waters.

The USA68 licences effectively have no privileges, currently. Transfers of licences have reportedly been suspended by DFO.

Accordingly, the licences are difficult to value. Some informants suggested a value in the \$10,000 range.

Note: the valuation for the previous year was \$150,000.

Outlook

Some fishery participants believe that the USA will reverse its position and restore fishing rights in US waters; others believe this is unlikely.

The future of this fishery and licence category is highly uncertain.

Sardine (ZS)

Valuation Parameters

Valuations performed:	Licence
Basis for valuation:	Anecdotal information
Confidence in valuation:	Low

Current Valuation

Licence Value at March 31, 2012

Category	# Licences	Value/ Licence (\$)	Total Value (\$)
ZS	25	250,000	6,250,000

Note: there are an additional 25 ZSF licences (Communal Commercial) held by First Nations.

Valuation Comments

This is a very closely held fishery, with only 25 commercial licences, and even fewer licence holders.

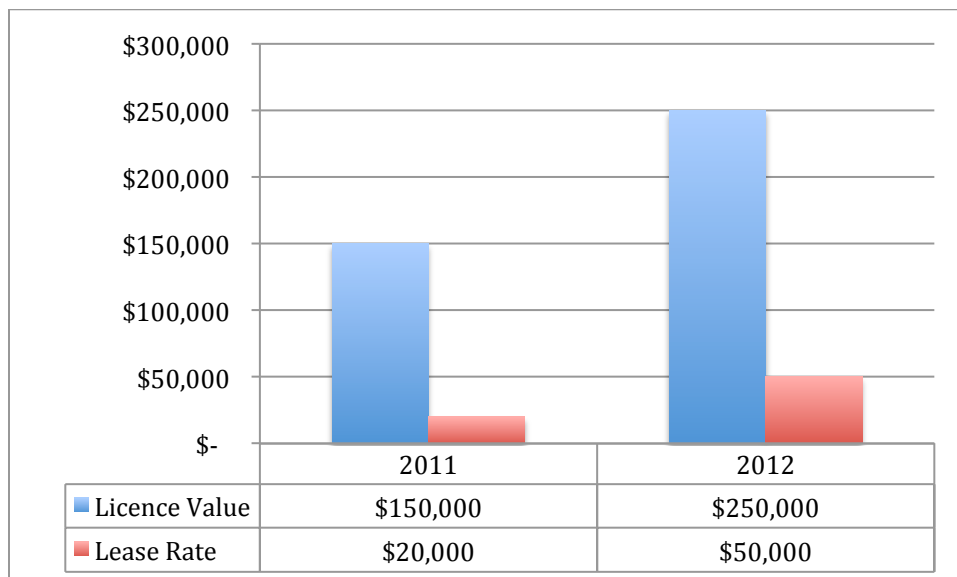
The valuation is an estimate only, likely on the low end, based on escalating lease rates for sardine licences.

Estimates of annual lease rates range from \$40,000 to \$80,000, with a value for 2012 pegged at \$50,000. Some leases are per-ton, based on a 540 ton quota per licence. This is substantially higher than the \$20,000 figure pegged for 2011.

With lease rates rising, it is logical that licence values have risen also. The \$250,000 value offered is likely very conservative, given that many licence categories trade in excess of 10x the annual lease rate.

Licensing Trends

Recent Sardine Valuations



Outlook

Rising lease rates and licence values are indicative of improving economics in this fishery.

With reasonably high catch volumes per vessel, and expanding markets for both food, feed, and bait, the outlook for this fishery is reasonably optimistic.

GROUND FISH: Halibut

General Description

<i>Licence Designation</i>	L
<i>Nature of Licence</i>	Vessel based – vessel owner may make annual application for issuance of licence
<i>Number of Commercial Licences (valued in this study)</i>	348
<i>No. of Communal Commercial Lic's (not valued in this study)</i>	87 (FL designation, Party-based)
<i>Licensing/Management Framework</i>	<p>Quota management system.</p> <p>Quota is separable from licence and divisible into one-pound increments. Quota can be re-allocated (transferred) amongst L licensed vessels on a temporary or permanent basis (FL's temporary only).</p> <p>Vessel must hold a halibut licence to hold or fish halibut.</p> <p>There is a minimum quantity of quota to be held on L licences (permanent allocation); see Management Plan for details.</p>
<i>Additional Information</i>	<p>About 150 L-licensed vessels actively fish for halibut.</p> <p>Quotas have declined in recent years due to stock fluctuation and distribution.</p> <p>Quota in the 2012 management plan for the commercial fishery is 5.95 million pounds.</p> <p>Vessel-based licence allows harvest of Schedule II species and transporting (packing).</p>

Valuation Parameters

Valuations performed:	<ol style="list-style-type: none"> 1. L licence (per foot and per licence) 2. Quota value per pound 3. Lease rate per pound 4. Vessels
Basis for valuation:	<p>< 5 L licence transactions</p> <p>< 10 open market quota sale transactions</p> <p>> 10 quota leases</p> <p>Anecdotal information</p>
Confidence in valuation:	<p>Moderate (transactions)</p> <p>Moderate (lease)</p>

Current Valuation

Licence and Quota Value at March 31, 2012

Category	# Licences/ lbs quota	Value per Licence/ lb quota (\$)	Total Value (\$)
L	348	1,500	22,237,200
Quota	4,988,907	65.00	324,278,975
Total Value			346,516,175

Valuation Comments

The value of L licence tabs ranges from \$1,000 to \$1,500 per foot; precise valuation is confounded because most sales include a minimum amount of quota and the apportionment can vary.

An average L tab (42') at \$1,500 per foot would have a value of \$63,000.

The number of pounds of quota valued excludes cumulative relinquishments (about 16.2% of the TAC).

Quota transactions ranged from \$60 per lb to \$68 per lb.

The market for halibut quota is very thin. There were few transactions, other than for small quantities, reported for the current period.

The lack of quota on the market is seen as one factor contributing to extremely high prices.

Some informants believe that halibut quota prices have peaked (though this sentiment has been expressed in prior years, at much lower price levels).

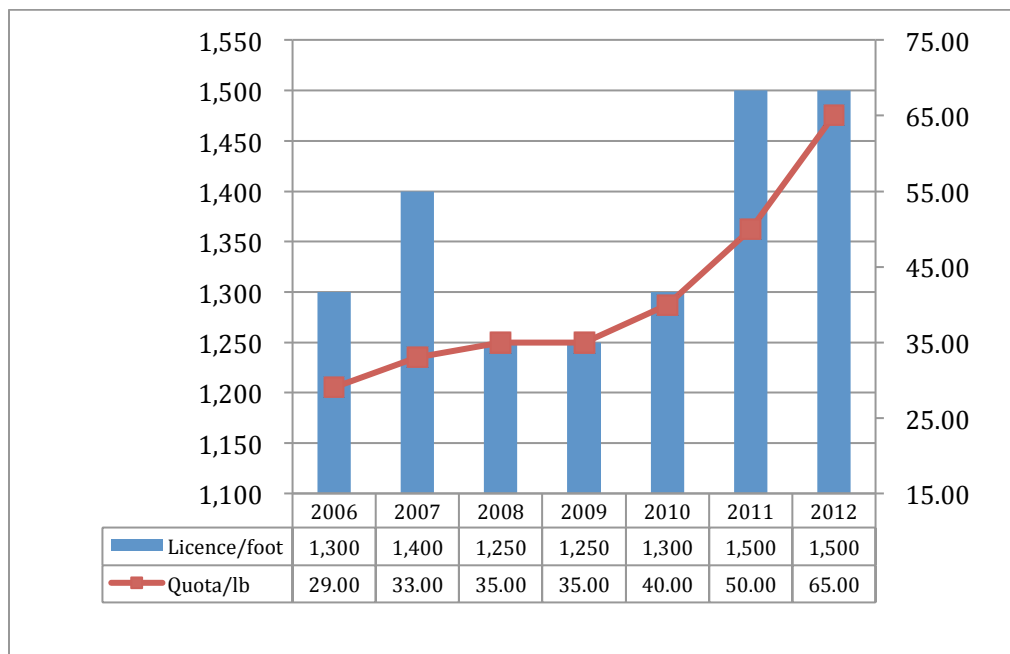
Vessel Value

Fleet composition is arrived at by using past data as a baseline. By nature, fleet vessel valuation is very imprecise and results should be used for general purposes only.

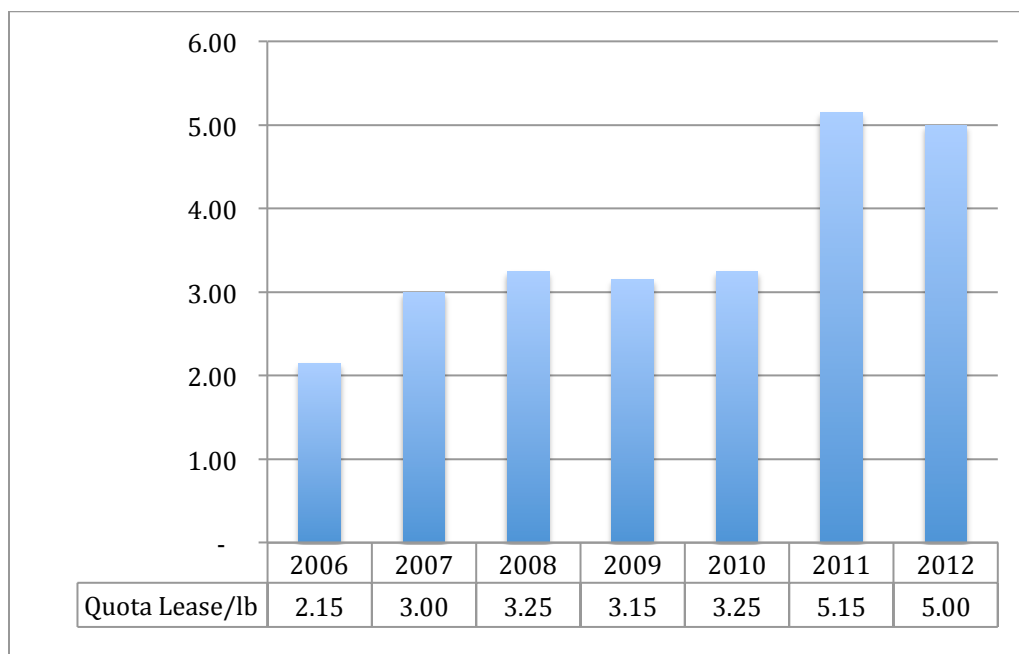
Halibut	# Vessels	Avg Vessel Value (\$)	Aggregate Value (\$)
Classic Style	231	131,000	30,261,000
Modern Style	154	275,000	42,350,000
Total	385	188,600	72,611,000

License & Quota Trends⁸

Recent L Licence and Halibut Quota Valuations (\$)



Recent Halibut Quota Lease Rates (\$ per lb)



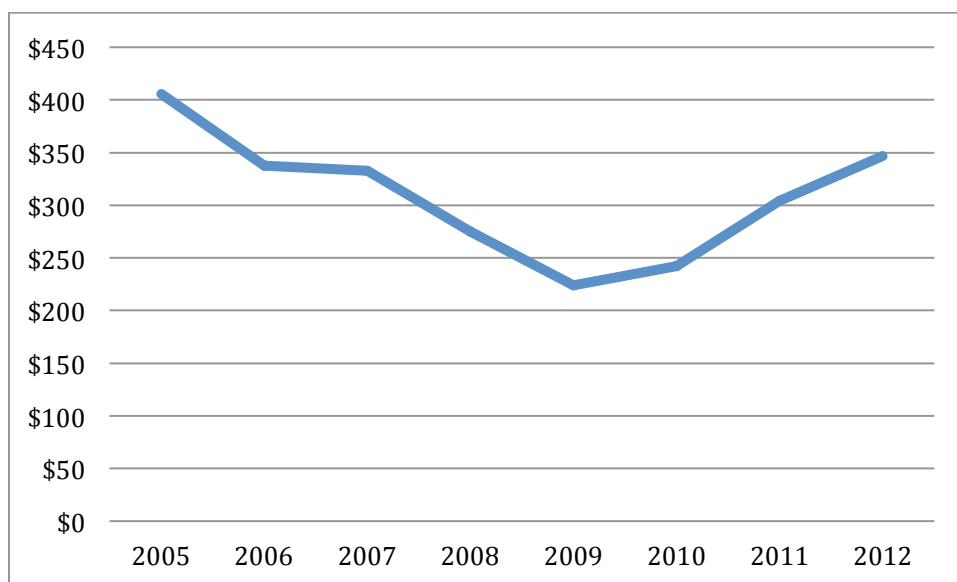
Lease rates in 2012 ranged from \$4.25 to \$6.00 per lb.

⁸ Values in charts are in nominal terms (not adjusted for inflation)

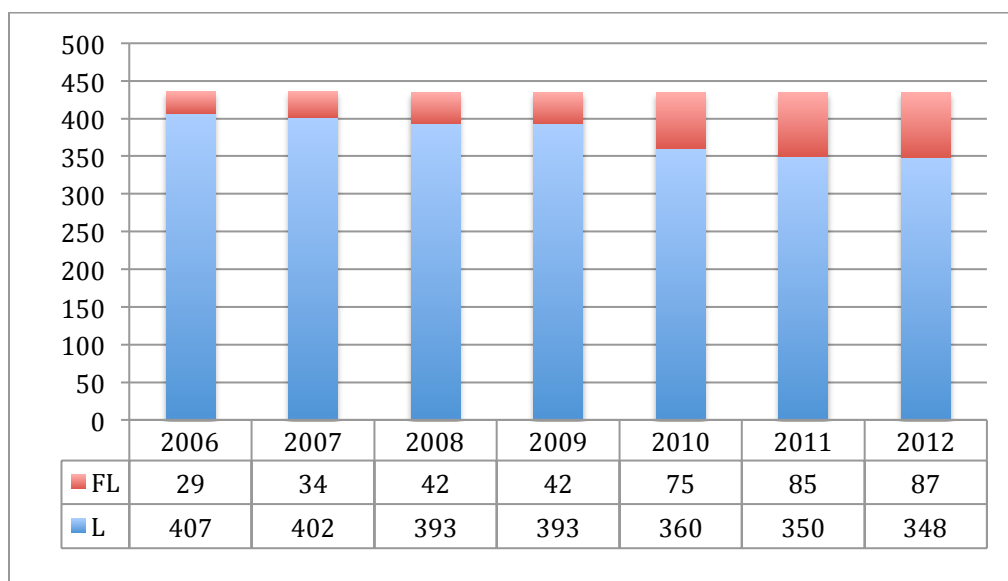
Rates started at the high end of the range early in 2012 but fell below \$5.00 during the fishing season when the landed price of halibut declined. By fall 2012 they appeared to back in the \$5.00 per lb range.

In addition to the lease fee for quota, lessees also tend to pay the DFO/management fees.

Aggregate Value of L Licences and Halibut Quota (\$ millions by year)⁹

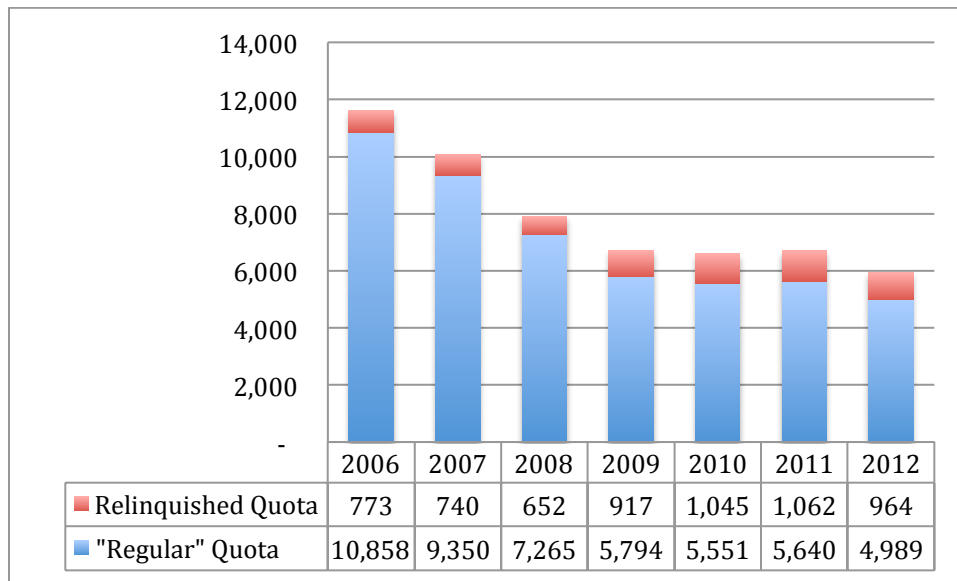


L Licence Counts by Category



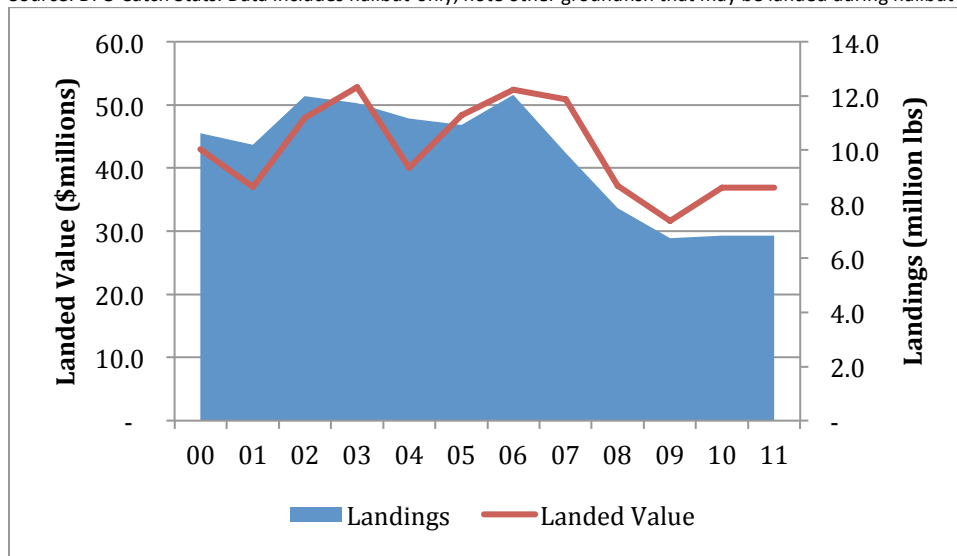
⁹ Excludes F licences and relinquished quota

Halibut Quota by Category (Relinquished vs "Regular") – thousands of lbs



Halibut Landings & Landed Value Trends

Source: DFO Catch Stats. Data includes halibut-only, note other groundfish that may be landed during halibut trips.



Outlook

Some participants believe that the price of halibut quota has peaked.

With current low Canadian commercial TAC levels, there is a shortage of quota supply compared to demand, especially when demand from the recreational fishery and First Nations is considered.

This has been made more acute by the recent reallocation of 3% of the commercial TAC to the sports sector (the allocation framework changed from 88%:12% to 85%:15%).

The inter-sectoral allocation issue has sparked serious concern within the commercial halibut sector about the security of IVQs.

When/if Pacific halibut abundance rises, and the International Pacific Halibut Commission sets higher TACs, the shortfall of halibut supply, and record-IVQ prices, may ease somewhat.

GROUND FISH: Sablefish (Black Cod)

General Description

<i>Licence Designation</i>	K
<i>Nature of Licence</i>	Vessel based – vessel owner may make annual application for issuance of licence
<i>Number of Commercial Licences (valued in this study)</i>	43
<i>No. of Communal Commercial Lic's (not valued in this study)</i>	5 (FK designation, Party-based)
<i>Licensing/Management Framework</i>	Quota management system. Each K licence was allocated a sablefish quota (permanent % of the TAC) based on a combination of vessel length and catch history. Quota is separable from licence and divisible into one pound increments. Quota can be re-allocated (transferred) amongst K licensed vessels on a temporary or permanent basis (FK's temporary only).
<i>Additional Information</i>	About 30 vessels actively fishing currently. Vessel-based licence allows harvest of Schedule II species and transporting (packing).

Valuation Parameters

Valuations performed:	1. K licence (per licence) 2. Quota value per pound 3. Lease rate per pound 4. Vessels
Basis for valuation:	< 3 K licence tabs < 3 quota transactions > 10 quota leases Anecdotal information
Confidence in valuation:	Moderate for all valuations

Current Valuation

Licence and Quota Value at March 31, 2012

Category	# Licences/ lbs quota	Value per Licence/ lb quota (\$)	Total Value (\$)
K Licence	43	275,000	11,825,000
Quota	2,769,339	60.00	166,160,349
Total Value			177,985,349

Valuation Comments

K licence estimations of value range from \$275,000 to \$300,000. The paucity of supply of K licences (43 in total, plus 5 FKs) is a key reason for the high tab value.

The number of pounds of quota valued excludes cumulative relinquishments (about 9% of the TAC).

Sablefish quota is quite tightly held, and very few quota transactions were reported this year.

It is commonly held that sablefish quota (j-cut) and halibut quota should have a similar value, given similar fishery management approaches, and high fish prices for both species. However, sablefish features higher harvesting costs and, with only 48 licences, there are fewer harvesting options; this could support a lower valuation. On the other hand, the greater scarcity of sablefish quota (less quota in fewer hands) may place upward pressure on quota prices.

Estimations of sablefish quota value range from \$50 per lb (based on sales last year) to \$62 per lb. A value of \$60 per lb (j-cut) is pegged for the current year, in the absence of significant quota trading activity.

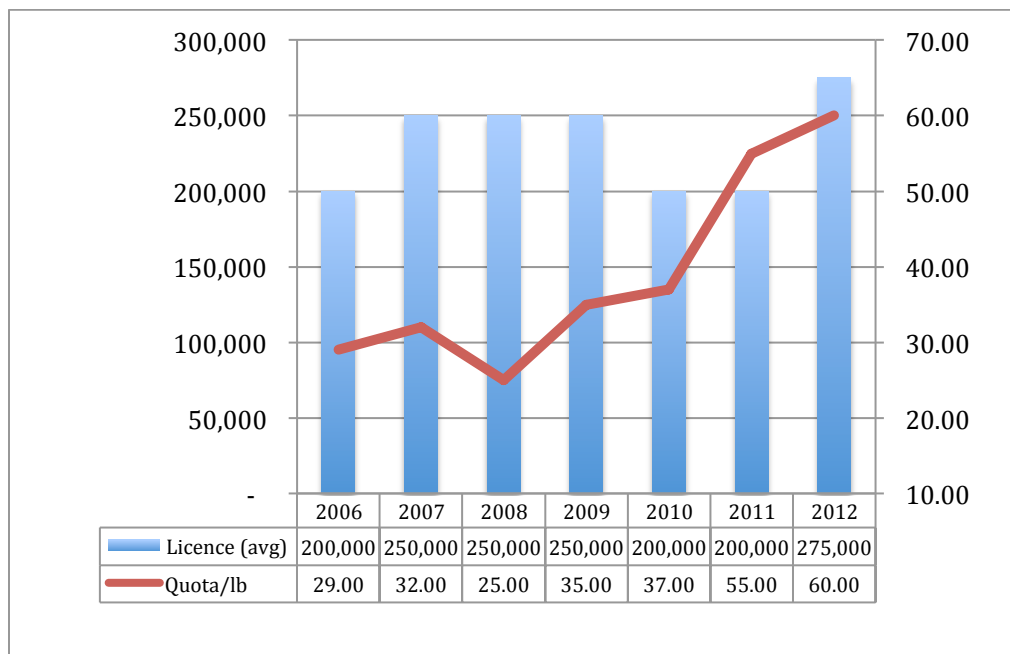
Vessel Value

Fleet composition is arrived at by using past data as a baseline. By nature, fleet vessel valuation is very imprecise and results should be used for general purposes only.

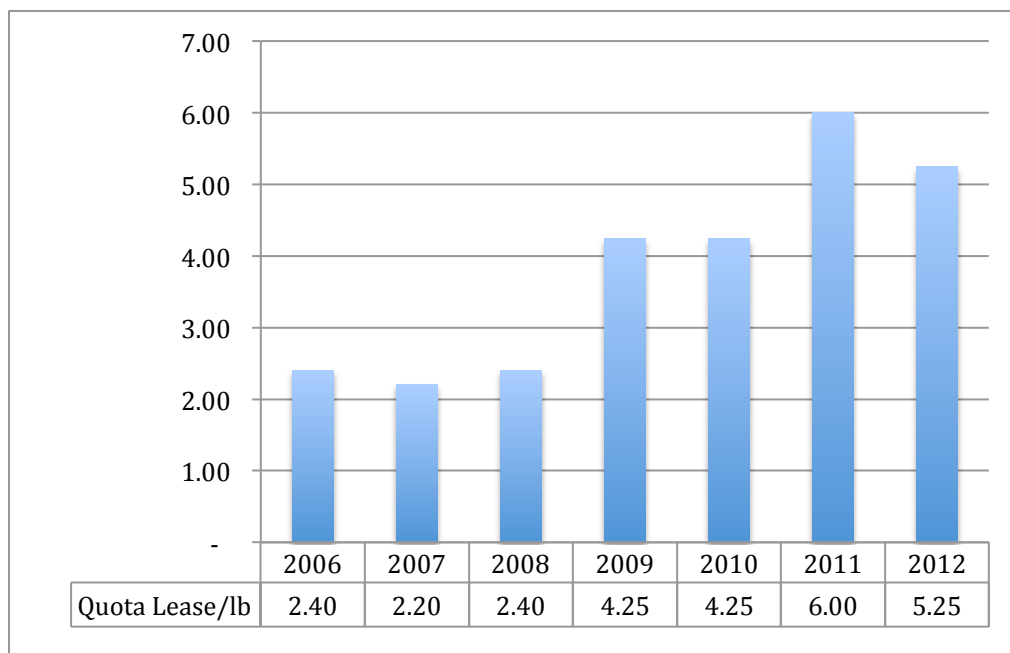
Sablefish	# Vessels	Avg Vessel Value (\$)	Aggregate Value (\$)
Classic Style	24	188,000	4,512,000
Modern Style	24	650,000	15,600,000
<i>Total</i>	48	419,000	20,112,000

License & Quota Trends¹⁰

Recent K Licence and Sablefish Quota Valuations (\$)



Recent Sablefish Quota Lease Rates (\$ per lb)



Lease rates range from \$4.25 to \$6.00 per j cut pound.

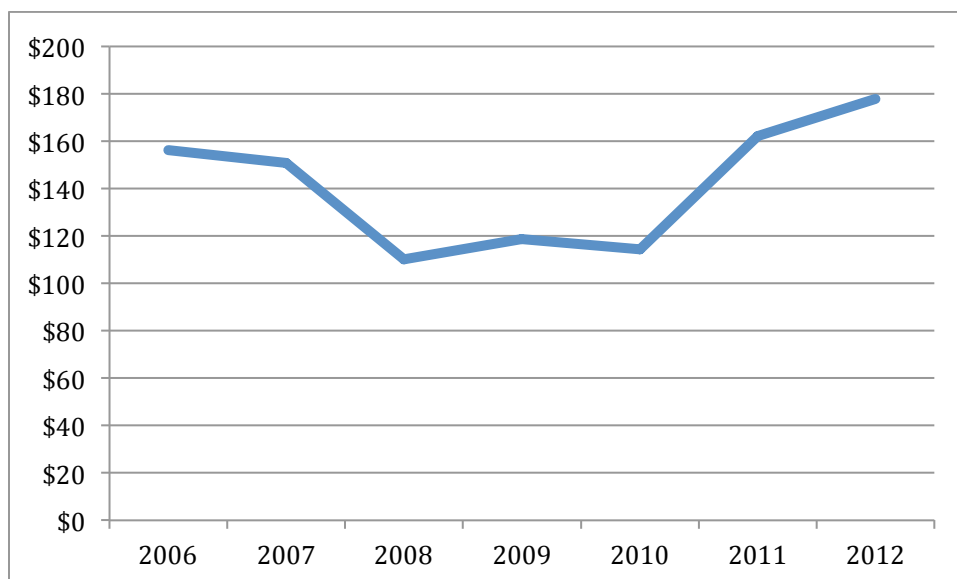
¹⁰ Values in charts are in nominal terms (not adjusted for inflation)

PACIFIC FLEET LICENCE, QUOTA, AND VESSEL VALUATION: AT MARCH 31, 2012

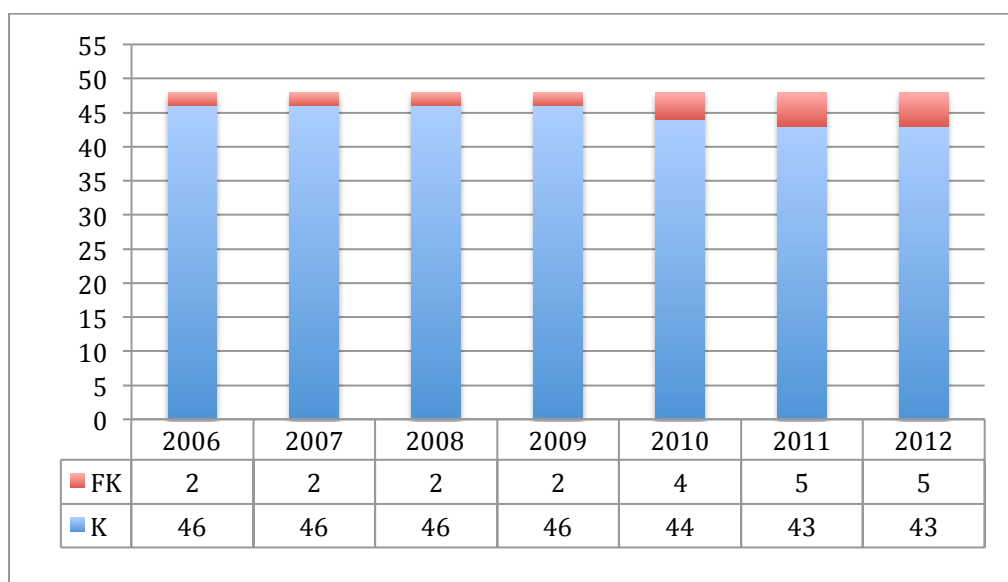
Rates were closer to the low end of the range in the fall of 2012; a reduction in the price of fish at the dock has resulted in dropping lease rates.

The lessor generally pays the DFO/management fees in sablefish (about 25 cents per lb).

Aggregate Value of K Licences and Sablefish Quota (\$ millions by year)¹¹

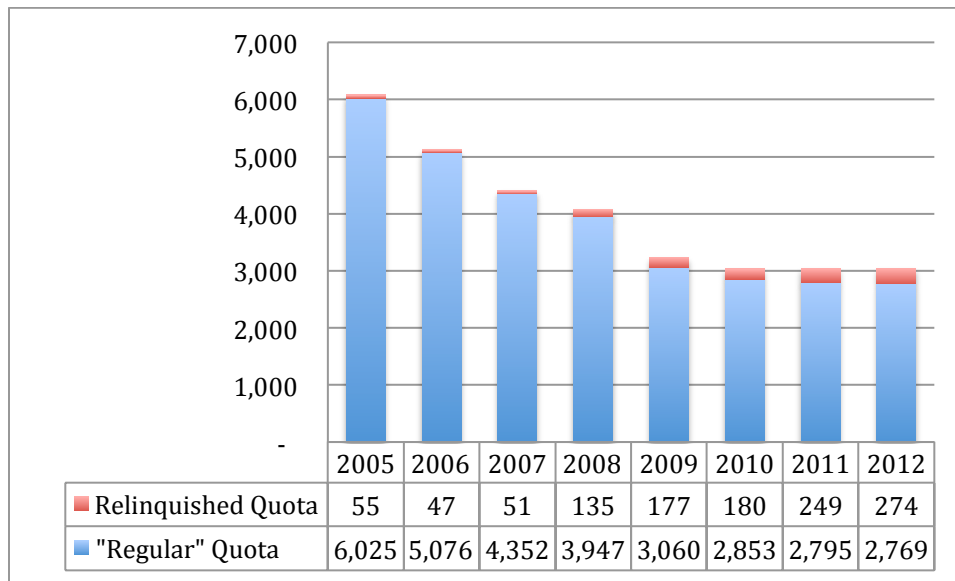


K Licence Counts by Category



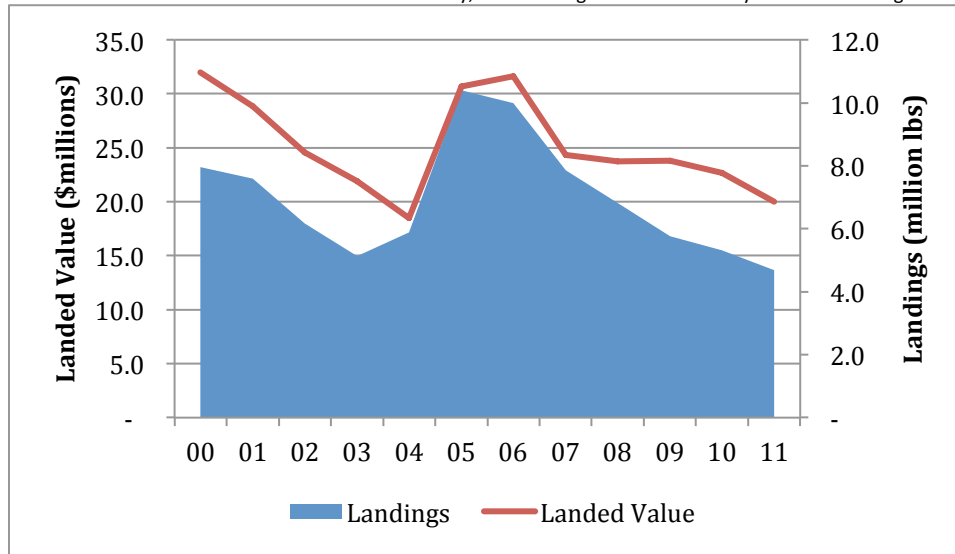
¹¹ excludes F licences and relinquished quota

Sablefish Quota by Category (Relinquished and "Regular") – thousands of lbs



Sablefish Landings & Landed Value Trends

Source: DFO Catch Stats. Data includes sablefish-only, note other groundfish that may be landed during sablefish trips.



Outlook

The lack of quota sales in the sablefish fishery is not a reflection of a weak market, but rather the fact that quota holdings are quite consolidated and holders are earning satisfactory returns. There is some optimism that the Canadian commercial sablefish TAC may rise in the near future. Record prices for sablefish at the dock eased somewhat during the current season, but remain at strong levels.

GROUND FISH: Groundfish Trawl

General Description

<i>Licence Designation</i>	T
<i>Nature of Licence</i>	Vessel based – vessel owner may make annual application for issuance of licence
<i>Number of Commercial Licences (valued in this study)</i>	137
<i>No. of Communal Commercial Lic's (not valued in this study)</i>	4 (FT designation, Party-based)
<i>Licensing/Management Framework</i>	Individual quotas – about 50 quotas based on species and areas – complex system. 80% of quota allocated to vessels as IVQ, and 20% allocated to vessels via the Groundfish Development Authority (see Management Plan). Quotas divisible and transferable amongst T licensed vessels on a temporary or permanent basis.
<i>Additional Information</i>	100% at sea observer coverage, 100% offload monitoring coverage. Each T licence has a unique holdings cap, which influences licence value. Vessel-based licence allows harvest of Schedule II species and transporting (packing).

Valuation Parameters

Valuations performed:	<ol style="list-style-type: none"> 1. T licence 2. Quota values per pound: <ol style="list-style-type: none"> a. Uncut quota b. Offshore hake 3. Lease rate per pound for above quotas 4. Vessels
Basis for valuation:	<p>< 3 licence transactions</p> <p>Approx. 5 groundfish quota transactions</p> <p>Approx. 5 hake quota transactions</p> <p>10 groundfish and hake quota leases</p> <p>Anecdotal information</p>
Confidence in valuation:	Moderate

Note that gulf hake and arrowtooth flounder are not valued in this report as these species/quotas possess very little value, are seldom traded, and valuations for them are difficult to discern.

Current Valuation

Licence and Quota Value at March 31, 2012

Category	# Licences/ lbs quota, thousands	Value per Foot/ lb quota (\$)	Total Value (\$ thousands)
T	137	\$1,500	12,947
Uncut quota	97,100	\$1.50	145,650
Hake outside	132,700	\$0.65	86,255
Total Value			244,852

Valuation Comments

Average T licence value \$94,500 (based on 63' average vessel length).

There is some premium for longer T licences with large holdings caps.

This fishery category has experienced a bit of a rebound in values, driven both by improving market conditions, and some large-scale quota purchases by two major processing companies.

Groundfish quota values range from \$1.40 to \$1.60 per lb.

Hake quota values range from \$0.60 to \$0.70 per lb. Hake quota valuations per-pound are challenging because the TAC is so volatile—the TAC is sharply lower in 2012.

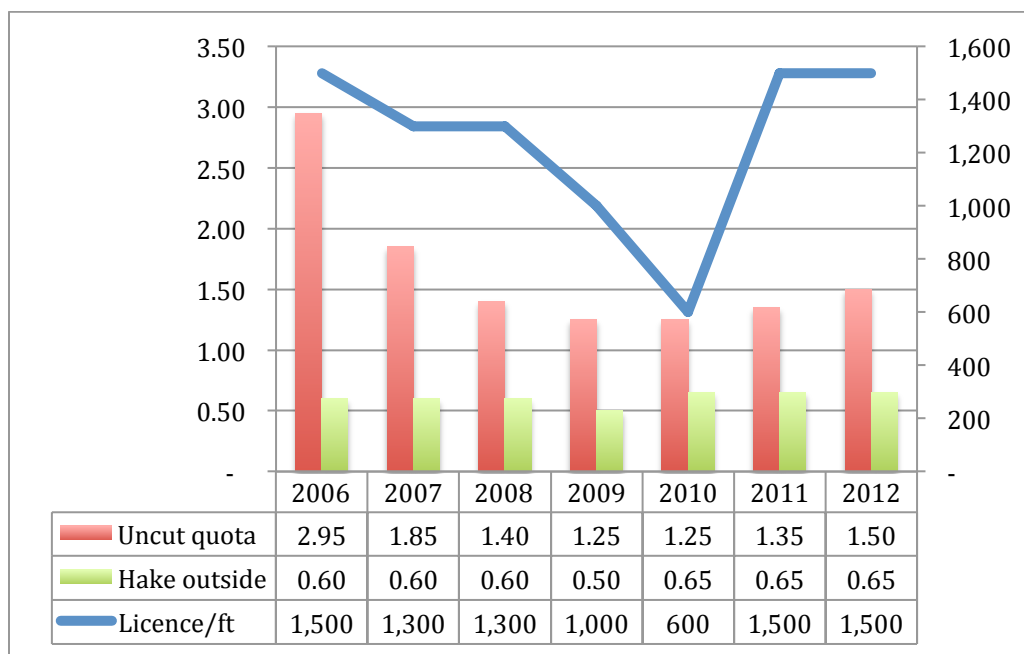
Vessel Value

Fleet composition is arrived at by using past data as a baseline. By nature, fleet vessel valuation is very imprecise and results should be used for general purposes only.

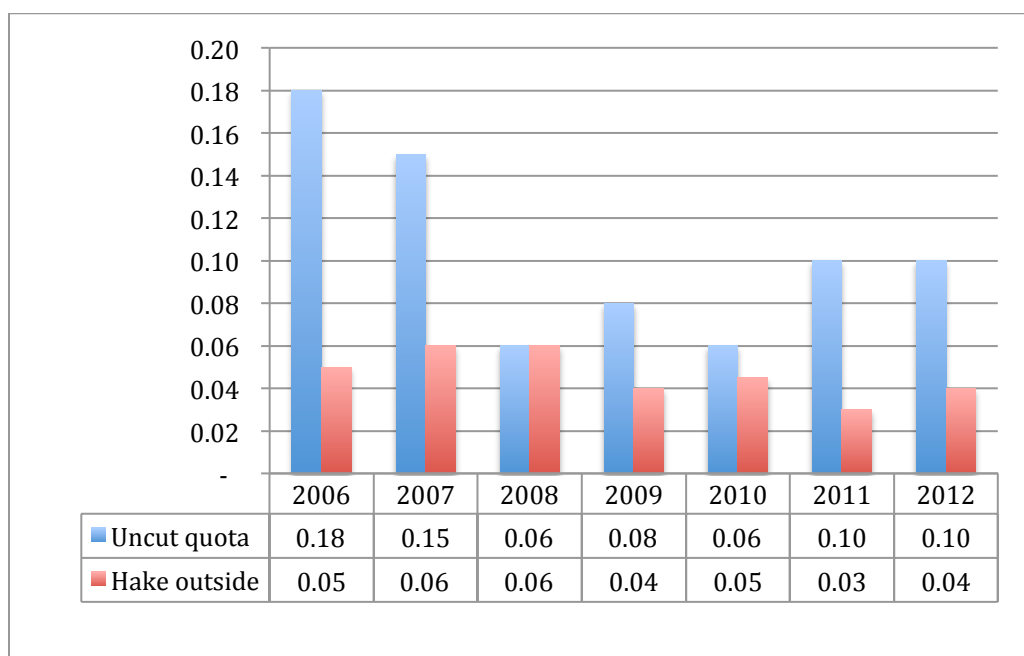
Trawl	# Vessels	Avg Vessel Value (\$)	Aggregate Value (\$)
Classic Style	68	440,000	29,920,000
Modern Style	69	1,125,000	77,625,000
<i>Total</i>	137	785,000	107,545,000

License & Quota Trends¹²

Recent T Licence and Trawl Quota Valuations (\$)



Recent Trawl Quota Lease Rates (\$ per lb)

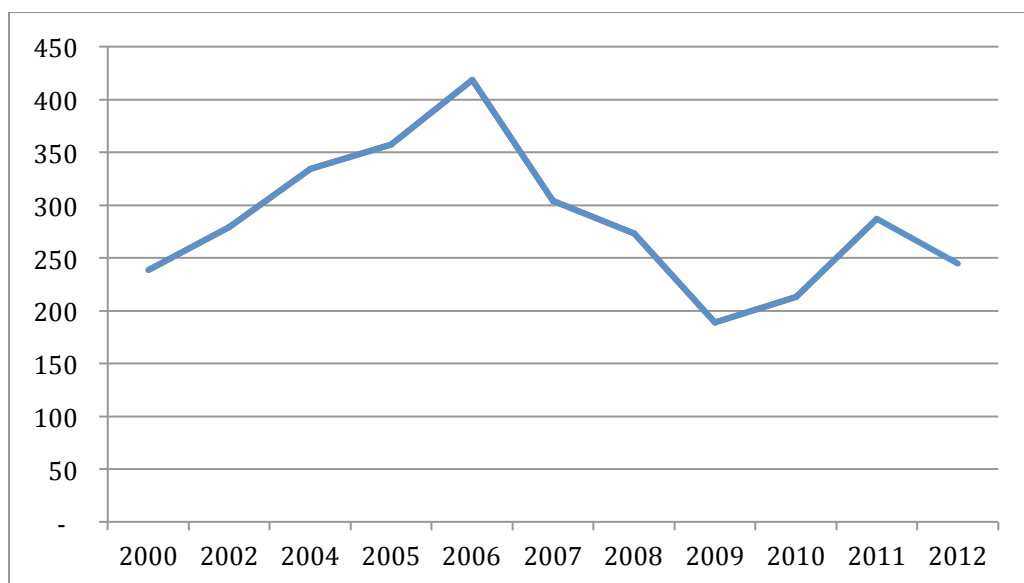


Groundfish quota leases ranged from \$.08 -\$.12 per lb.

¹² Values in charts are in nominal terms (not adjusted for inflation)

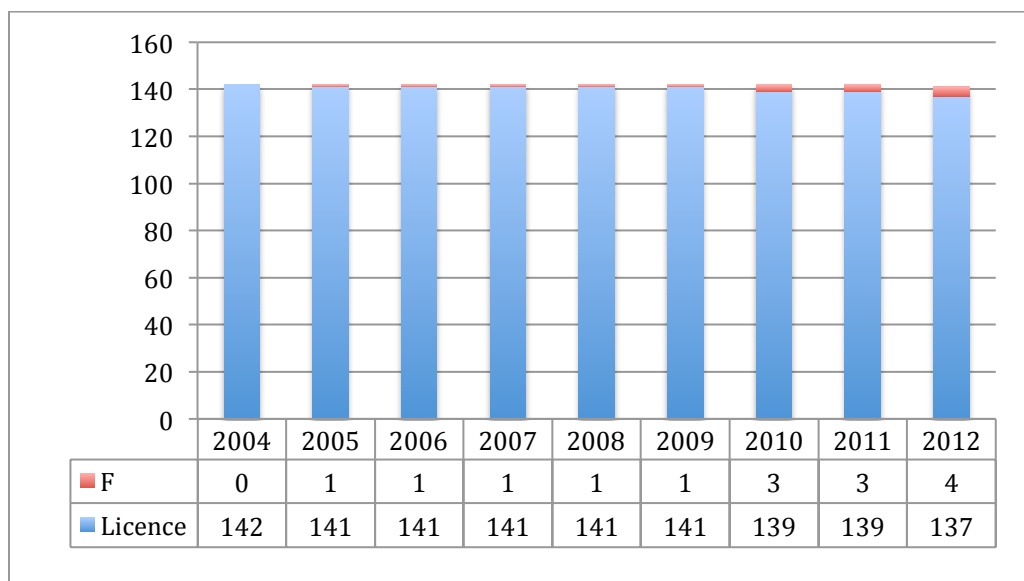
Hake quota leases ranged from \$.03 -\$.08 per lb. Rates are linked to the expected and actual catch-ability of the hake stocks through the season (if catch prospects are poor, prices fall).

Aggregate Value of T Licences and Trawl Quota (\$ millions by year)¹³



The reduction in the value of trawl licences and quota is driven by a sharply lower hake TAC. Other indicators are generally positive.

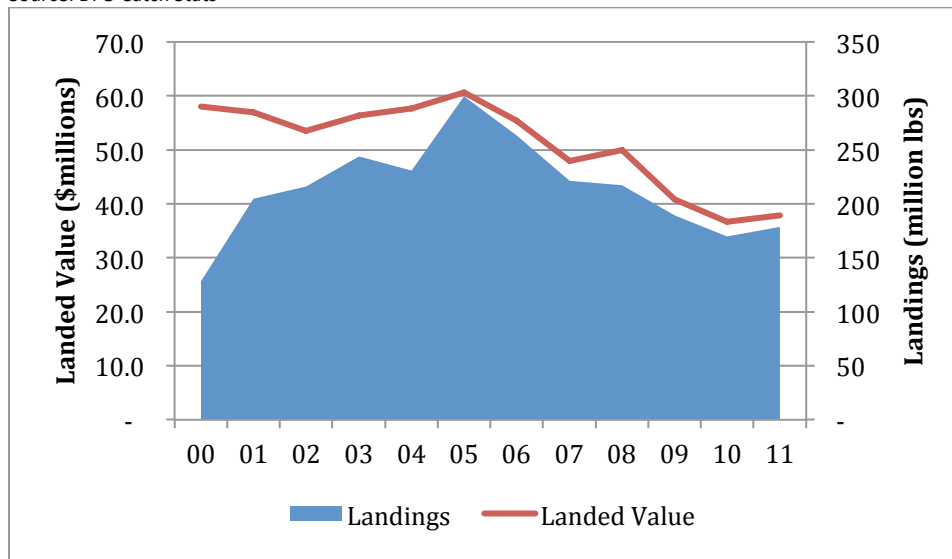
Licence Counts by Category



¹³ Relinquished quota is not excluded from this calculation as the amount is immaterial (0.24% of the TAC in 2009 and 2010; nil in prior years)

Groundfish Trawl Landings & Landed Value Trends

Source: DFO Catch Stats



Outlook

The groundfish portion of the fishery has seen improved performance over the last several months; this is partly attributed to the new Individual Vessel Quota system that has been implemented in the Washington-Oregon-California fishery. The quota system in the lower-48 has resulted in a more orderly distribution of landings, leading to improved prices.

The hake fishery continues to see strong market conditions for headed & gutted product, though the catch-ability of the fish for fresh-delivery vessels remains challenging.

The trend in the hake fishery toward larger freezer/factory trawler has continued.

This fishery is extremely pro-active in addressing environmental concerns, with the trawl sector having recently entered a pact with environmental groups to limit the footprint of bottom trawl gear.

GROUND FISH: Rockfish Hook & Line

General Description

<i>Licence Designation</i>	ZN
<i>Nature of Licence</i>	Party based – individual, corporation, or band may make annual application for issuance of licence
<i>Number of Commercial Licences (valued in this study)</i>	222 (164 Outside, 58 Inside)
<i>No. of Communal Commercial Lic's (not valued in this study)</i>	40 (FZN designation – 27 Outside, 13 Inside)
<i>Licensing/Management Framework</i>	The pilot integration program has been made permanent, effective 2010. ZN licences are allocated Individual Vessel Quota (IVQ). IVQ can be transferred within the ZN fleet, and to other groundfish sectors. Each licence receives an equal share of ZN rockfish allocation.
<i>Additional Information</i>	The inside fishery is severely constrained due to inshore rockfish conservation measures. 100% electronic monitoring is in place.

Valuation Parameters

Valuations performed:	<ol style="list-style-type: none"> 1. ZN Inside licence 2. ZN Outside licence 3. Annual lease rate for Inside and Outside 4. Vessels
Basis of valuation:	> 5 outside ZN licence transactions < 3 inside ZN licence transactions > 10 outside ZN leases < 10 inside ZN leases Anecdotal information
Confidence in valuation:	Moderate for Outside ZN Low for Inside ZN

Current Valuation

Licence Value at March 31, 2012

Category	# Licences	Value/ Licence (\$)	Total Value (\$)
ZN Inside	58	25,000	1,450,000
ZN Outside	164	140,000	22,960,000
ZN Total	222	109,955	24,410,000

Note: in prior reports ZN licences were value on a per-foot basis; per licence is now used as this seems to be the unit most commonly used in the industry.

Valuation Comments

Inside ZN trading is very limited this year; the potential listing of quillback rockfish (the primary target of the inside fishery) has negatively impacted this category.

Inside ZN licence values (based primarily on anecdotal information) range from \$20,000 to \$30,000 per licence.

Outside ZN licences appear to be holding their values; values range from \$125,000 to \$150,000 per licence.

There may still be a premium for longer ZN licences.

Vessel Value

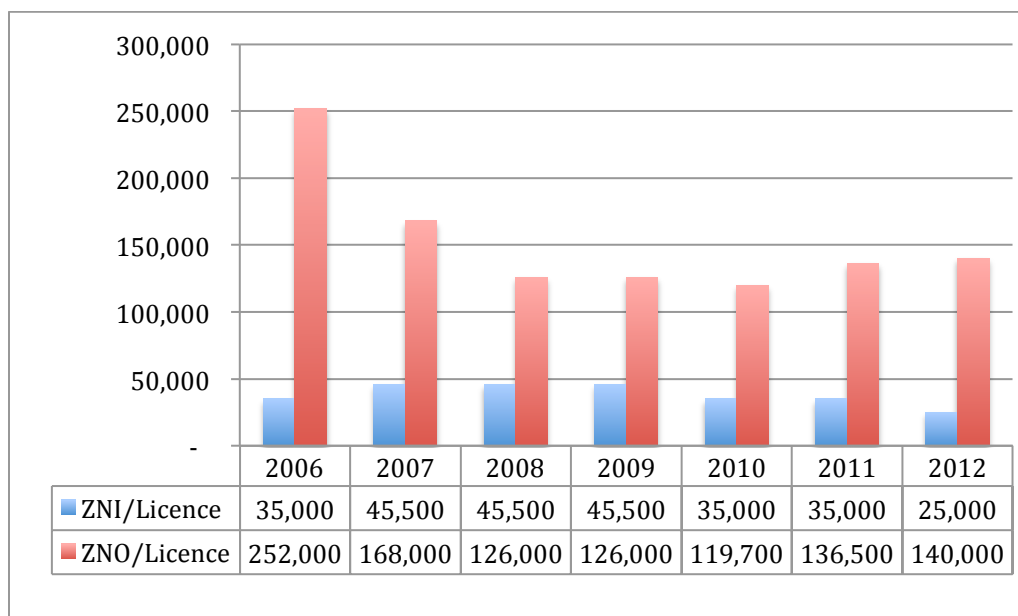
Vessel counts exclude F licences. Fleet composition is arrived at by using past data as a baseline. By nature, fleet vessel valuation is very imprecise and results should be used for general purposes only.

ZN Outside	# Vessels	Avg Vessel Value	Aggregate Value
Classic Style	118	120,000	14,196,000
Modern Style	64	293,000	18,664,100
<i>Total</i>	182	180,550	32,860,100

ZN Inside	# Vessels	Avg Vessel Value (\$)	Aggregate Value (\$)
Classic Style	12	75,000	900,000
Modern Style	7	196,000	1,372,000
<i>Total</i>	19	119,579	2,272,000

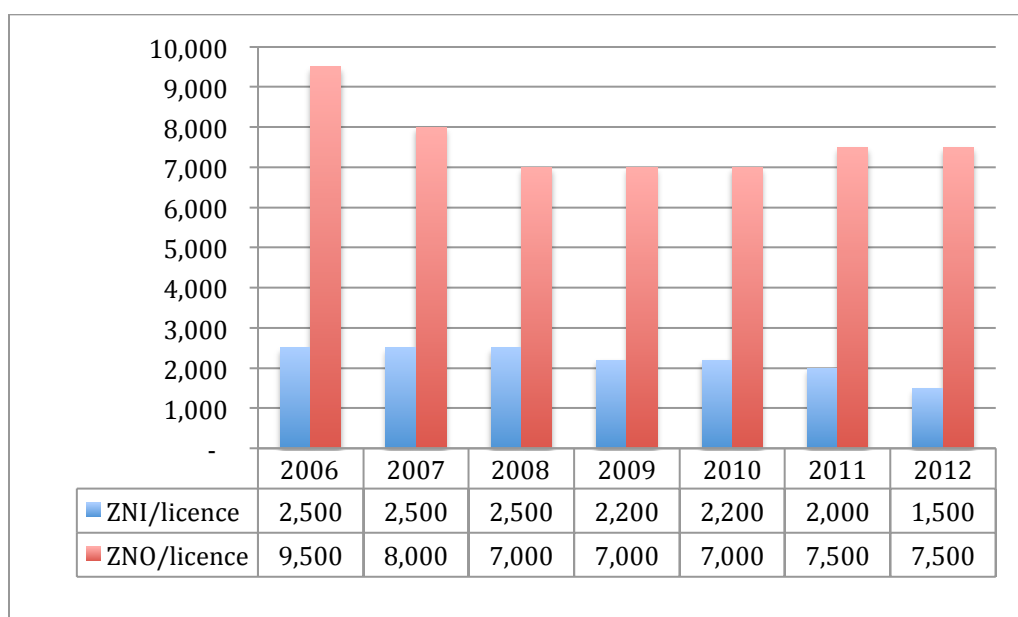
Licensing Trends¹⁴

Recent ZN Licence Valuations (\$ per licence)



Note, the high outside ZN valuation in 2006 was induced by the fear that rockfish bycatch would be in short supply for the halibut and sablefish fisheries; this fear was eased after the integrated groundfish program was underway.

Recent ZN Licence Lease Rates (\$)

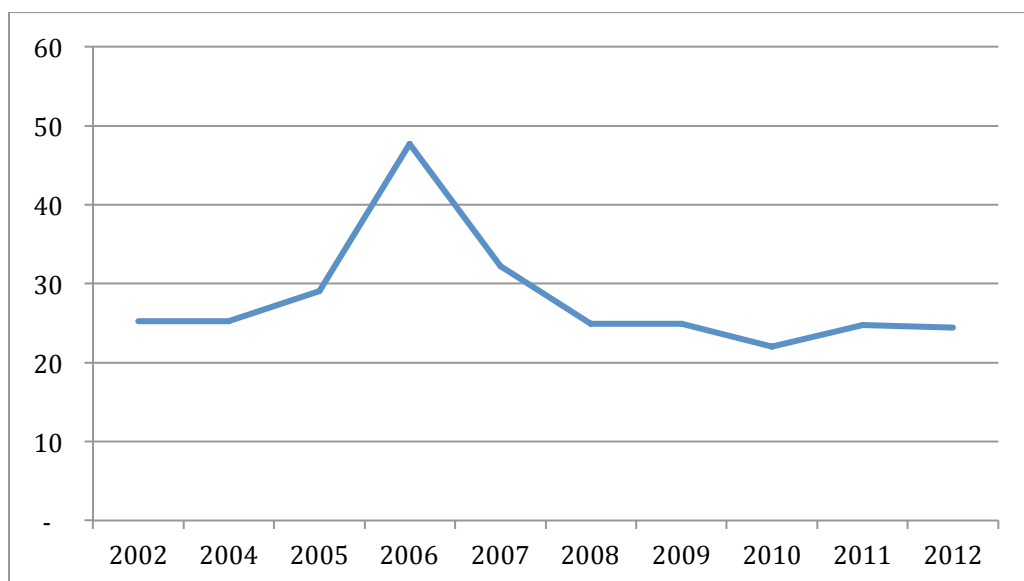


Outside ZN licence leases range from \$7,000 to \$10,000.

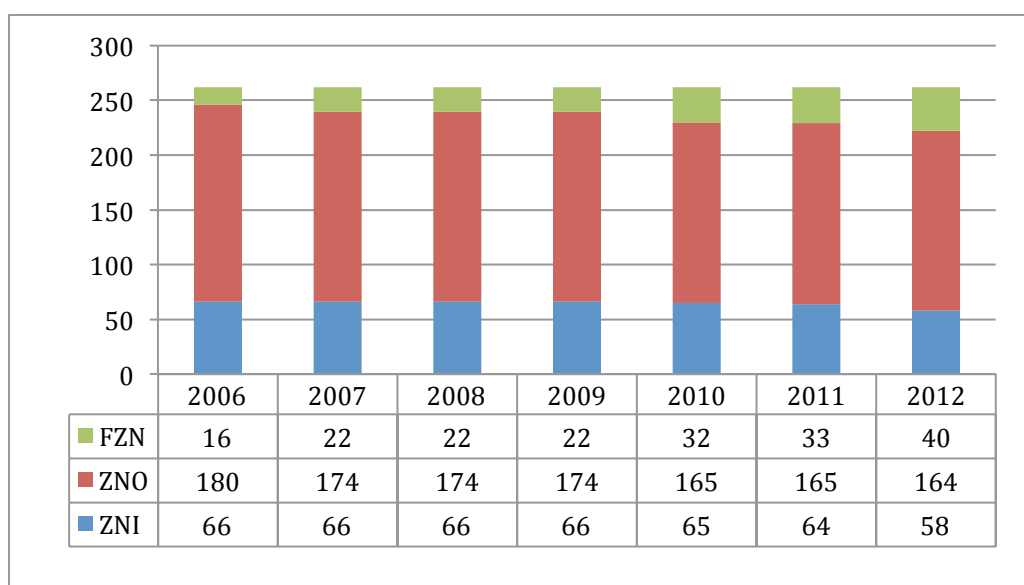
¹⁴ Values in charts are in nominal terms (not adjusted for inflation)

Inside ZN lease rates are deemed to have softened somewhat, though some leases still occur at rates slightly over \$2,000.

Aggregate Value of ZN Licences (\$ millions by year)

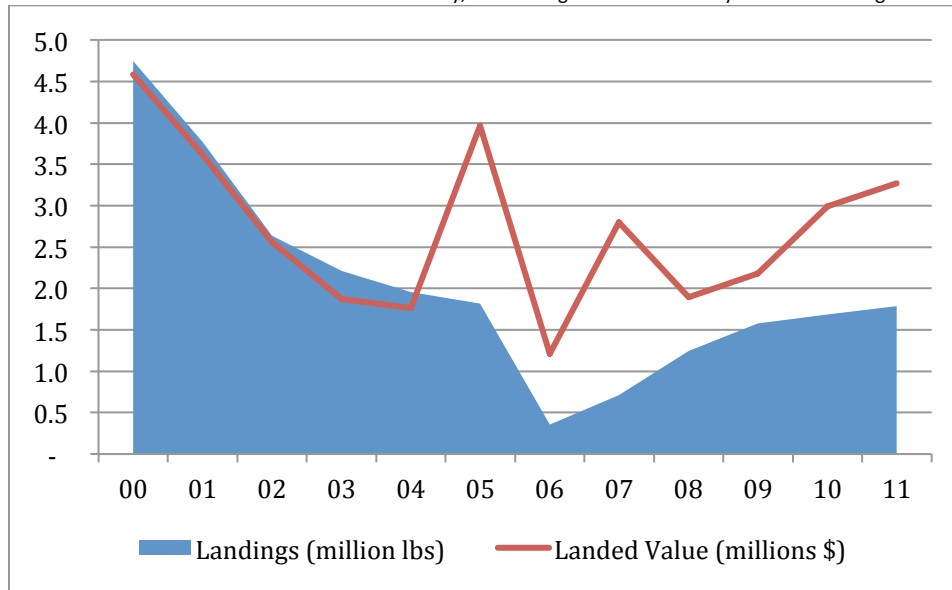


Licence Counts by Category



Rockfish Hook & Line Landings & Landed Value Trends

Source: DFO Catch Stats. Data includes rockfish-only, not other groundfish that may be landed during rockfish trips.



Immediately after implementation of the integration pilot program ZN landings dipped sharply, as rockfish was “hoarded” by other sectors as bycatch. As concerns that rockfish would be in short supply have been allayed, landings have steadily grown.

Outlook

The outside ZN licence category supports both targeted rockfish fishing and the rockfish bycatch requirements of other groundfish categories (notably halibut and sablefish).

The inside ZN fishery to a large extent targets quillback rockfish for the live market; the potential listing of quillback under the Species at Risk Act has created future uncertainty for this category.

GROUND FISH: Lingcod and Dogfish

Lingcod and dogfish are discrete hook and line fisheries under the integrated groundfish IFMP. These fisheries are now managed under an IVQ program and both permanent and temporary trades of quota are permitted.

Unlike most other fisheries, however, lingcod and dogfish do not have dedicated licence categories, but can be executed under the authority of any vessel based licence. Therefore, these fisheries are difficult to pigeonhole for valuation purposes.

The lingcod and dogfish fisheries receive their own allocations, and can also source fish from, and lease fish to, other groundfish sectors.

Some valuation information on quota and lease values for these two fisheries is found below:

Lingcod

<5 transactions

Quota Value at March 31, 2012

Category	lbs Quota	Value/lb	Total Value (\$)
Lingcod Quota (H&L)	2,376,559	\$9.00	21,389,029

Lingcod quota transactions range from \$7.50 to \$10.00 per lb. Values were at the higher end of the range in the summer and fall of 2012.

Lingcod leases for the hook and line fishery that are “uncut” (include all of the management areas) range from 26 – 35 cents/lb. Prices for specific management area vary by area, ranging from 10 -12 cents/lb for northern areas, to a high of 60 cents/lb on the west coast of Vancouver Island.

Dogfish

<5 transactions

Quota Value at March 31, 2012

Category	lbs Quota	Value/lb	Total Value (\$)
Dogfish Quota (H&L)	20,987,792	\$0.20	4,197,558

Dogfish quota transactions range from \$0.14 to \$0.25 per lb.

Dogfish leases tend to be for virtually no value. Some leases at 1 cent per lb were reported.

SHELLFISH: Prawn-by-Trap

General Description

<i>Licence Designation</i>	W
<i>Nature of Licence</i>	Vessel based – vessel owner may make annual application for issuance of licence
<i>Number of Commercial Licences (valued in this study)</i>	197
<i>No. of Communal Commercial Lic's (not valued in this study)</i>	55 (FW designation, Party-based)
<i>Licensing/Management Framework</i>	Fishery managed by time and area, with trap limits (300 traps per vessel). Licence stacking – additional traps may be placed on a W licensed vessel, allowing a total of 500 traps to be deployed.
<i>Additional Information</i>	Competitive fishery. Licence (trap) stacking provision creates a licence lease market. May retain octopus. Vessel-based licence allows harvest of Schedule II species and transporting (packing).

Valuation Parameters

Valuations performed:	1. W licence (per foot) 2. Annual lease rate (per licence) 3. Vessels
Basis for valuation:	> 5 open market transactions 3 PICFI licences 10 leases Anecdotal information
Confidence in valuation:	Moderate

Current Valuation

Licence Value at March 31, 2012

Category	# Licences	Value/ Foot (\$)	Total Value (\$)
W Licences	197	19,000	136,619,500

Valuation Comments

Average licence value based on \$19,000 per foot and 36' vessel = \$684,000.

Transactions ranged from \$16,000 to \$23,000 per foot.

Part of the reason for a wide range of values is that transactions often include vessels and fishing gear, and apportionment of values between asset categories varies, and can be based on tax or other considerations.

There appears to be a premium for small licences (< 32') and very large licences (> 50'); some seine vessel owners seek to diversify into this fishery.

This remains a fairly active licence category for open market transactions.

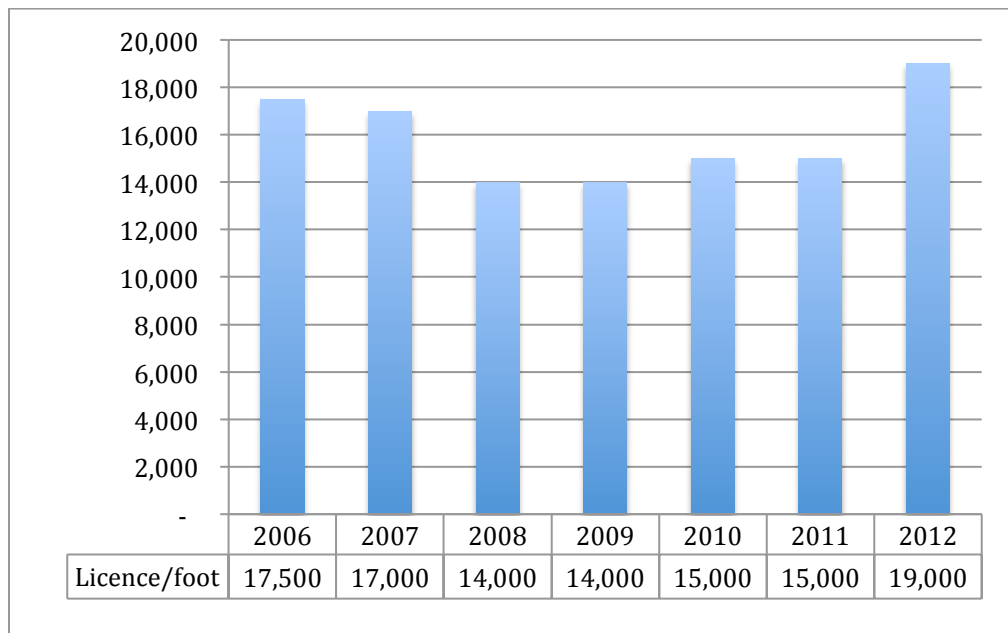
Vessel Value

Fleet composition is arrived at by using past data as a baseline. By nature, fleet vessel valuation is very imprecise and results should be used for general purposes only.

Prawn	# Vessels	Avg Vessel Value (\$)	Aggregate Value (\$)
Classic Style	112	130,000	14,560,000
Modern Style	113	290,000	32,770,000
<i>Total</i>	225	210,356	47,330,000

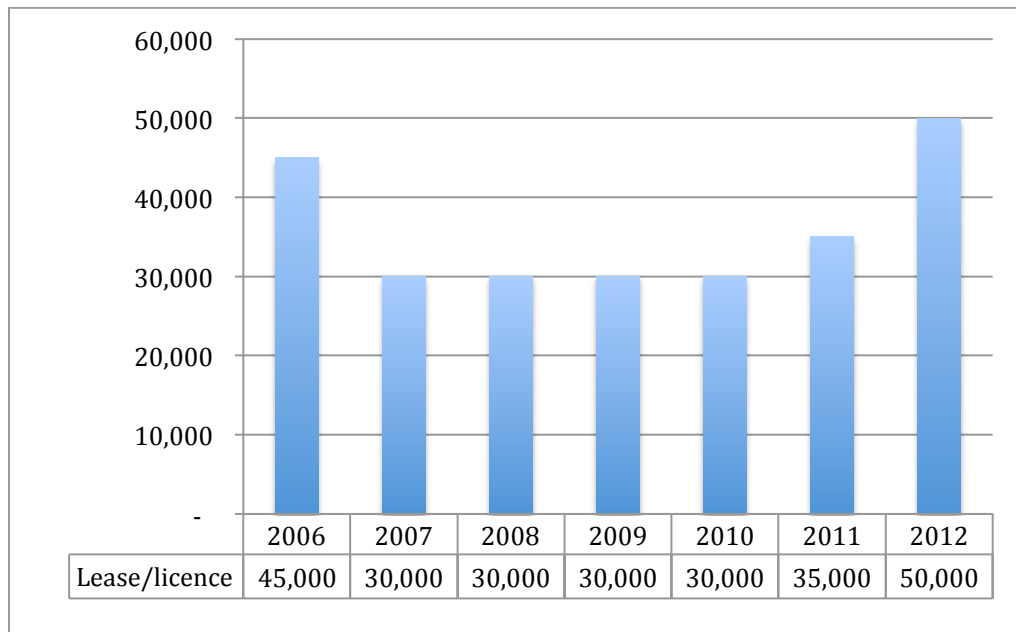
Licensing Trends¹⁵

Recent W Licence Valuations (\$)



¹⁵ Values in charts are in nominal terms (not adjusted for inflation)

Recent W Licence Lease Rates (\$)

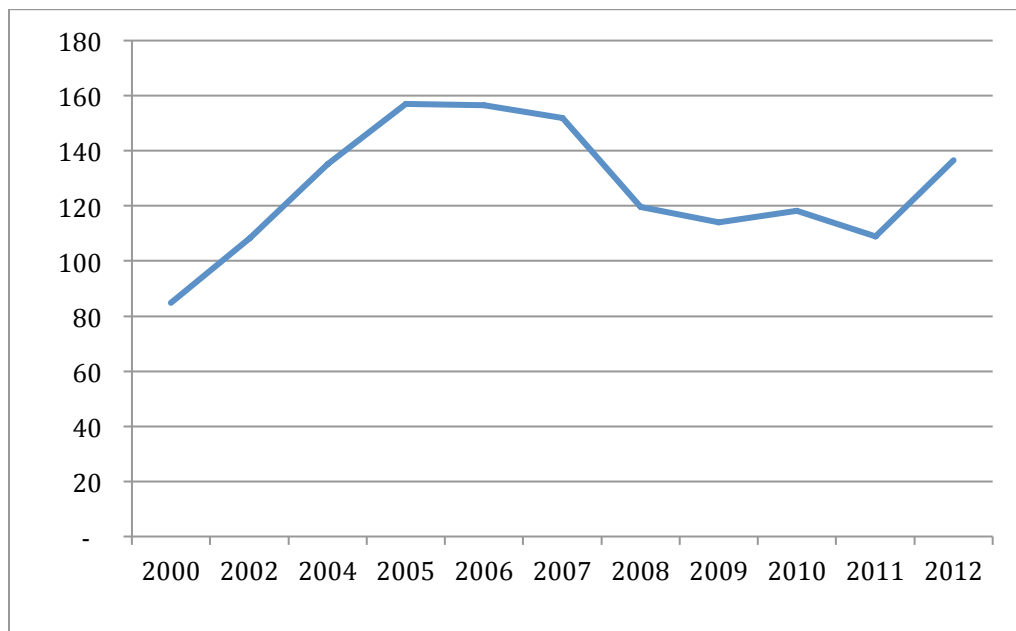


Lease rates ranged dramatically, from \$25,000 to \$60,000 per licence.

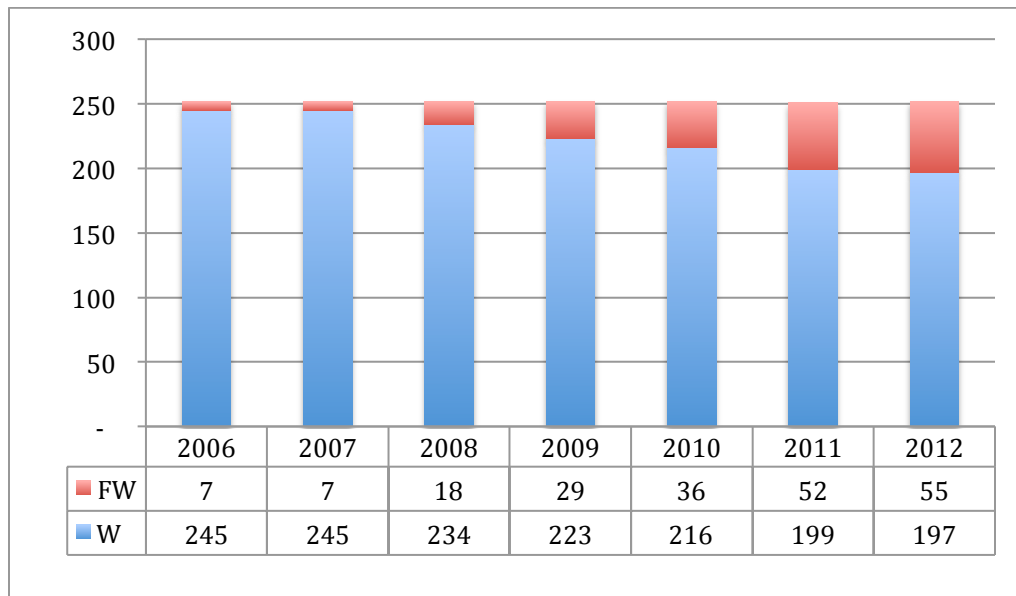
Some of the leases at the low end of the range were for F-class licences that were leased within First Nations communities.

Leases in the \$45,000 to \$55,000 were more typical of the bulk of arms-length transactions.

Aggregate Value of W Licences (\$ millions by year)

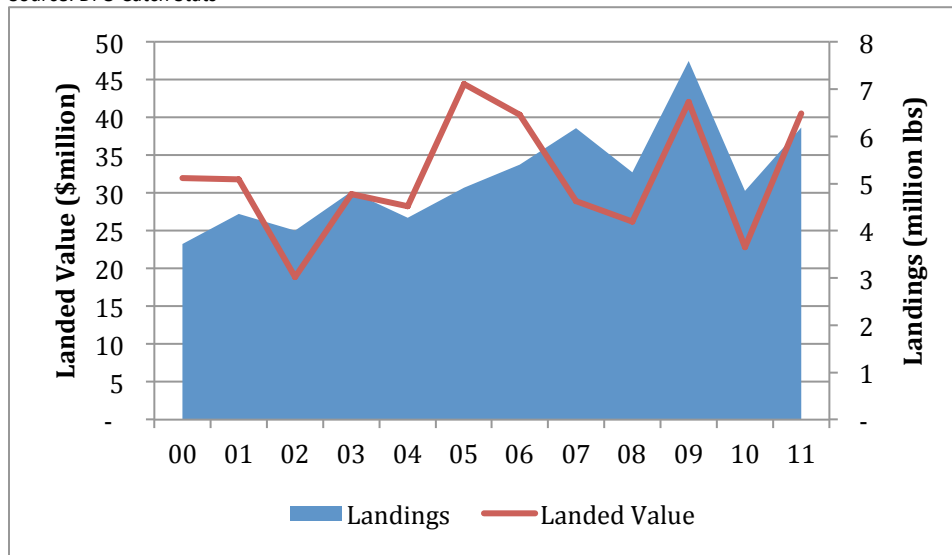


W Licence Counts by Category



Prawn Landings & Landed Value Trends

Source: DFO Catch Stats



Outlook

Although the fishing seasons for prawn are trending shorter, ex-vessel prices have been strong and market conditions healthy.

BC spot prawns have gained exposure in markets other than Japan in recent years.

This category appeals to young, aggressive fishermen.

SHELLFISH: Crab

General Description

<i>Licence Designation</i>	R
<i>Nature of Licence</i>	Vessel based – vessel owner may make annual application for issuance of licence
<i>Number of Commercial Licences (valued in this study)</i>	194
<i>No. of Communal Commercial Lic's (not valued in this study)</i>	27 (FR designation, Party-based)
<i>Licensing/Management Framework</i>	Area Licensing – 7 areas. No stacking allowed – must select a single area. Area re-selection periodically; a re-selection took place applying for the 2010-2012 seasons. Fishery managed on basis of time, area, size, sex, and trap limits (limits vary by area)
<i>Additional Information</i>	Competitive fishery. Currently, the resource and market situation is reasonably healthy. Area A (QCI/Hecate Strait) is the predominant area in terms of landings and landed value. Vessel licence allows harvest of Schedule II species and transporting (packing). Vessel-based licence virtually precludes licence leasing, though a market is emerging for FR (Communal Commercial party-based) licences.

Valuation Parameters

Valuations performed:	1. R licence (per foot) 2. Vessels
Basis for valuation:	> 10 open market licence transactions 2 PICFI transactions Anecdotal information
Confidence in valuation:	Low to Moderate (the wide variation in prices makes precise valuation impossible)

Current Valuation

Licence Value at March 31, 2012

Category	# Licences	Value/ Foot (\$)	Total Value (\$)
R Licences	194	22,000	136,576,000

Valuation Comments

This is an active category, and the market was very buoyant this year.

Licence transactions ranged from \$16,000 to over \$30,000 per foot.

At \$22,000 per foot, and given an average vessel length of about 32', the indicated average licence value is \$704,000.

Some informants believe that the intrinsic worth of the licence is below the high-end selling prices. Catch volumes have not been strong, especially in the northern areas, for the last few seasons, but prices have been firm (especially in the live market).

The premium for northern-area licences appears to have eroded.

There are 27 F-category crab licences and some of these are leased annually. Leases were in the \$20,000 to \$35,000 range.

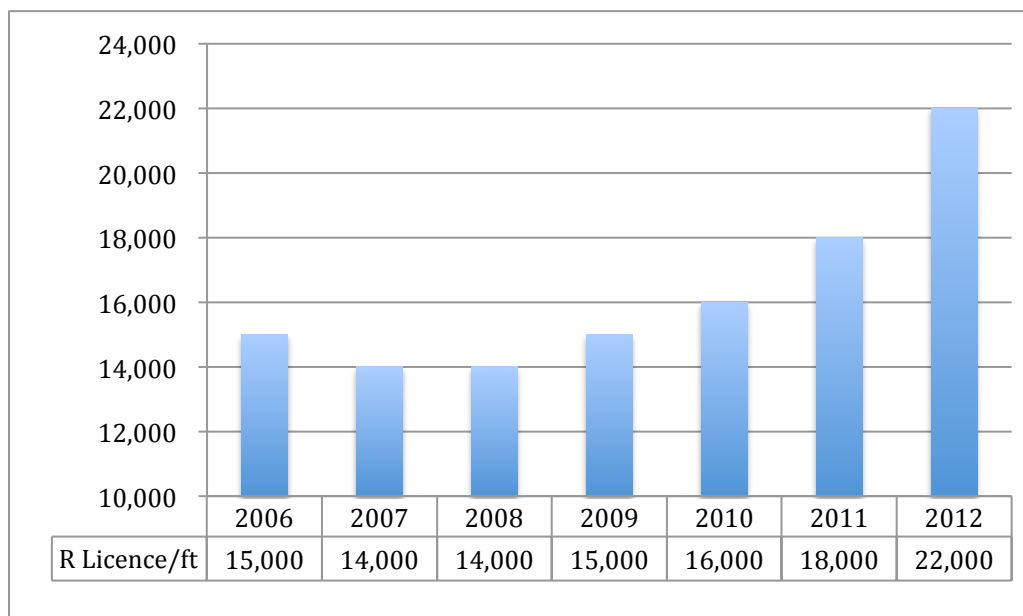
Vessel Value

Fleet composition is arrived at by using past data as a baseline. By nature, fleet vessel valuation is very imprecise and results should be used for general purposes only.

Crab	# Vessels	Avg Vessel Value (\$)	Aggregate Value (\$)
Classic Style	85	112,000	9,520,000
Modern Style	127	233,000	29,591,000
<i>Total</i>	212	184,486	39,111,000

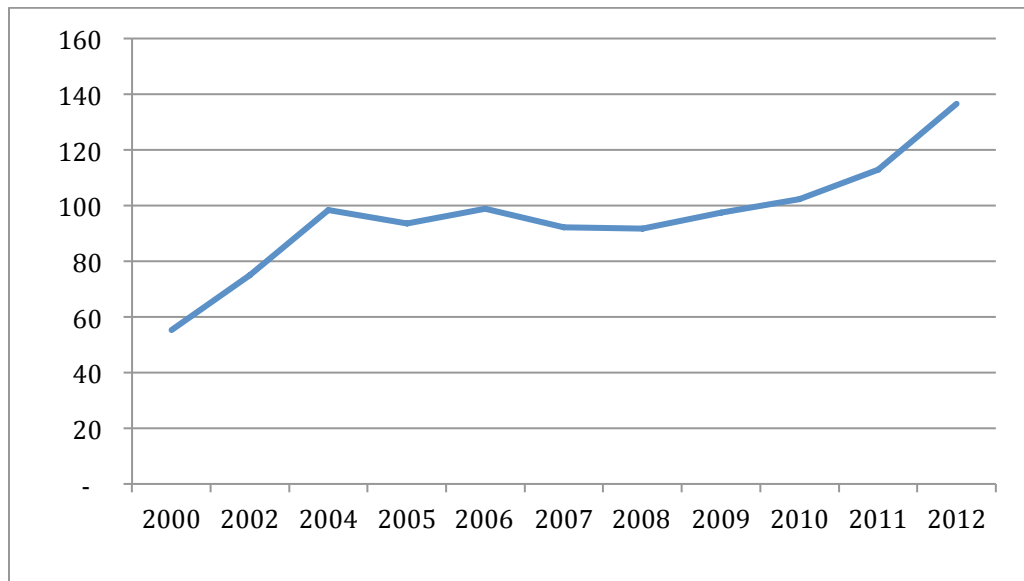
Licensing Trends¹⁶

Recent R Licence Valuations (\$)

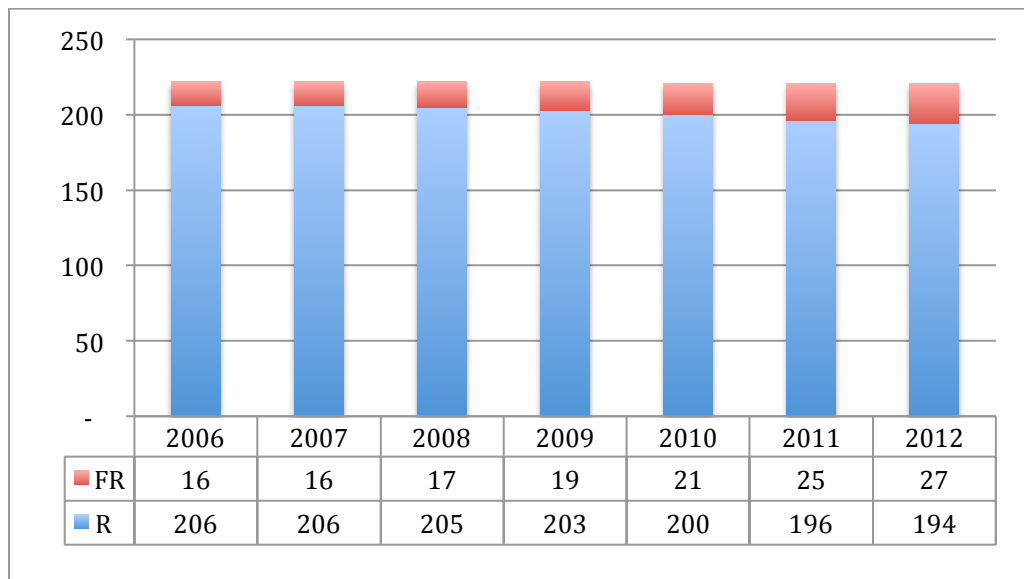


¹⁶ Values in charts are in nominal terms (not adjusted for inflation)

Aggregate Value of R Licences (\$ millions by year)

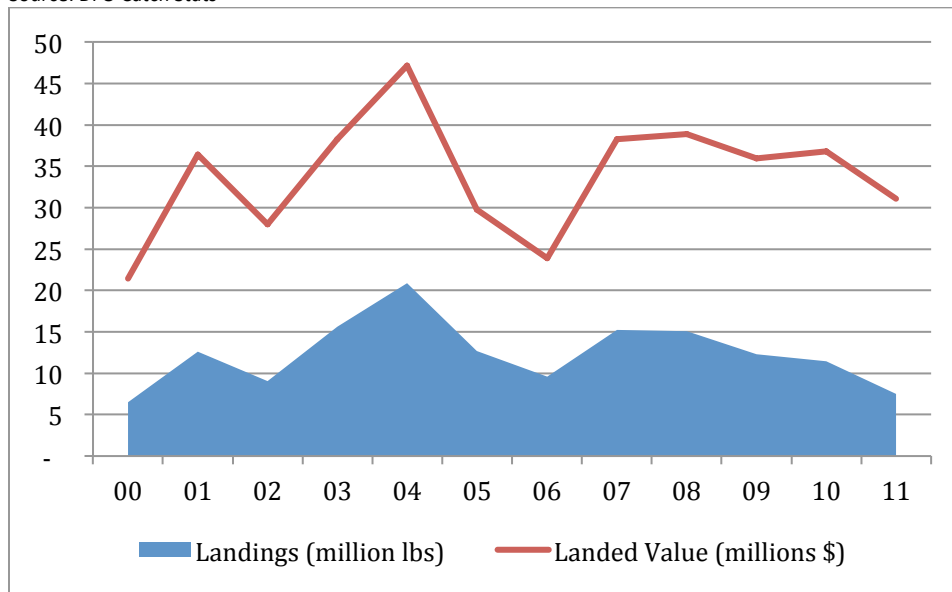


Licence Counts by Category



Crab Landings & Landed Value Trends

Source: DFO Catch Stats



Outlook

While much of the annual crab harvest occurs in the summer, the fishery in some management areas affords harvests over a prolonged period.

Although overall catches are trending down, lucrative markets for live products are allowing some harvesters to earn strong returns.

There is some concern that economic challenges in China could pose problems for the BC fishery (China/Hong Kong represents about 50% of purchases).

High prices for crab licences appear to reflect an optimistic view by BC stakeholders.

SHELLFISH: Shrimp-by-Trawl

General Description

<i>Licence Designation</i>	S
<i>Nature of Licence</i>	Vessel based – vessel owner may make annual application for issuance of licence
<i>Number of Commercial Licences (valued in this study)</i>	221
<i>No. of Communal Commercial Lic's (not valued in this study)</i>	18 (FS designation, Party-based)
<i>Licensing/Management Framework</i>	Fishery managed on basis of specie quotas by area (shrimp management areas). Areas are closed to fishing once a specie harvest is reached in a given area. Only one S (or FS) licence per vessel allowed.
<i>Additional Information</i>	Competitive fishery. Poor markets for pink shrimp in recent years have meant that the majority of the licensed fleet has not participated in the fishery. Vessel based licence virtually precludes licence leasing. Vessel-based licence allows harvest of Schedule II species and transporting (packing).

Valuation Parameters

Valuations performed:	1. S licence (per foot) 2. Vessels
Basis for valuation:	< 10 licence transactions Anecdotal information
Confidence in valuation:	Moderate

Current Valuation

Licence Value at March 31, 2012

Category	# Licences	Value/ Foot (\$)	Total Value (\$)
S Licences	221	800	7,248,800

Valuation Comments

Transactions ranged from \$300 - \$1,000 per foot.

There is a premium for longer licences; this appears to be based largely on future expectations.

No information of leasing of F category S licences was unearthed.

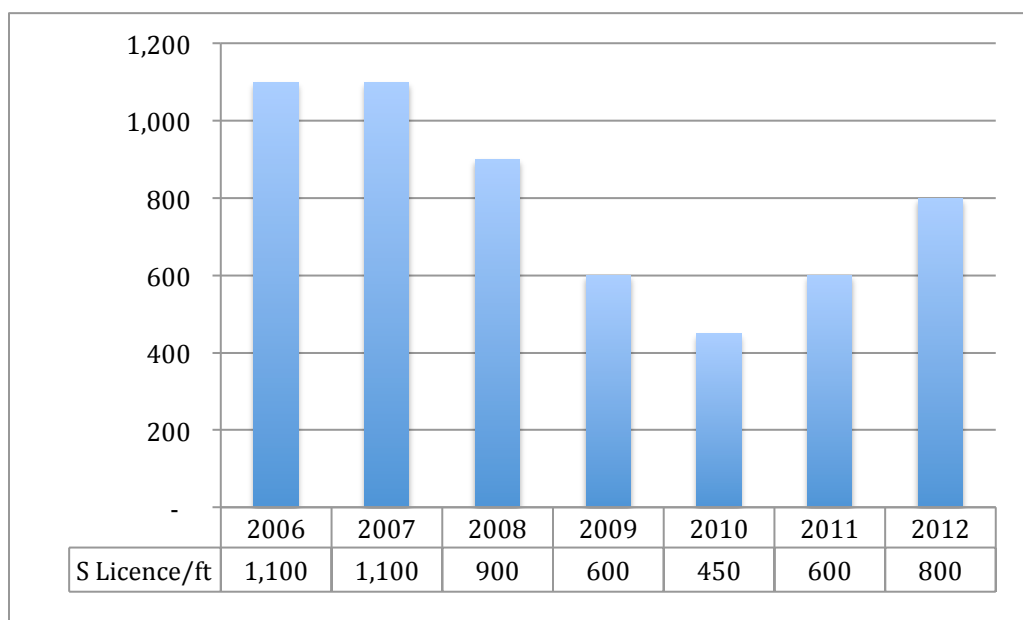
Vessel Value

Fleet composition is arrived at by using past data as a baseline. By nature, fleet vessel valuation is very imprecise and results should be used for general purposes only.

Shrimp Trawl	# Vessels	Avg Vessel Value (\$)	Aggregate Value (\$)
Classic Style	160	43,000	6,880,000
Modern Style	69	133,000	9,177,000
<i>Total</i>	229	70,118	16,057,000

Licensing Trends¹⁷

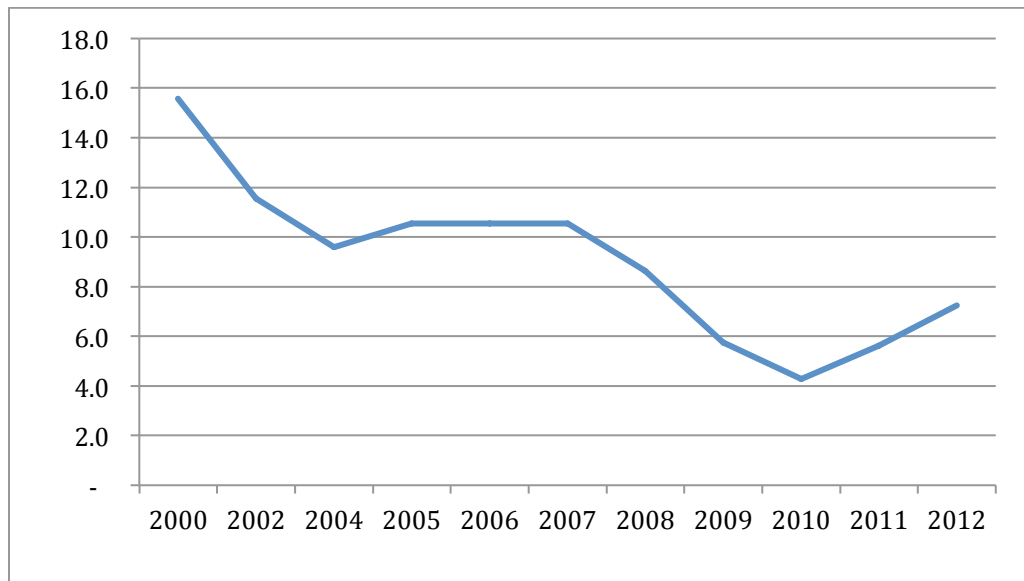
Recent S Licence Valuations (\$)



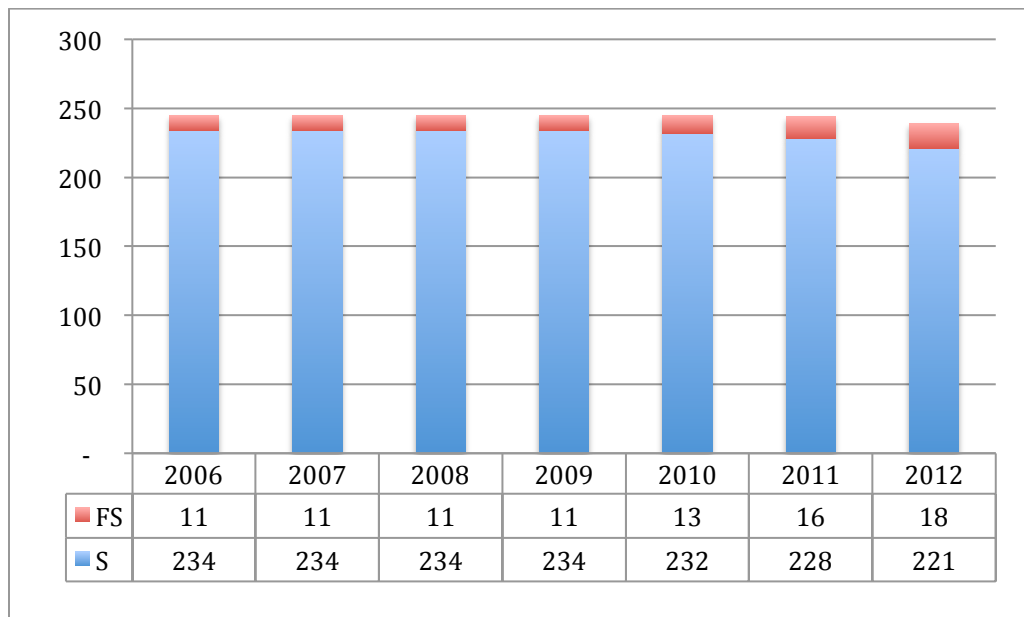
The rise in licence value since 2010 does not appear to reflect an improvement in the profitability of the fishery. Rather, it likely reflects that values bottomed-out at an extremely low level in 2010.

¹⁷ Values in charts are in nominal terms (not adjusted for inflation)

Aggregate Value of S Licences (\$ millions by year)

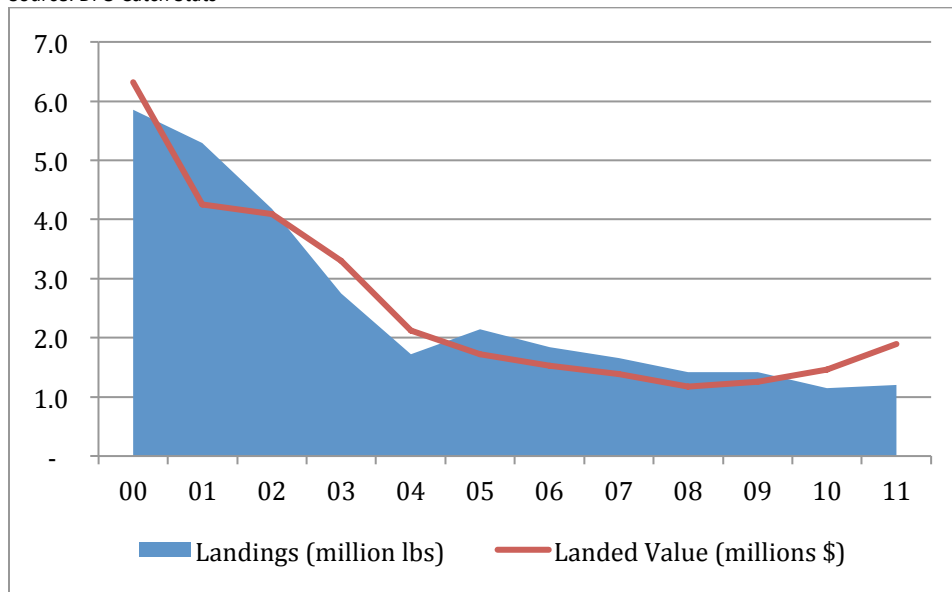


S Licence Counts by Category



Shrimp Landings & Landed Value Trends

Source: DFO Catch Stats



Outlook

The shrimp fishery continues to languish, as the BC industry enjoys few competitive advantages relative to international industrial fisheries.

Participation rates remain low (more than ½ the fleet is inactive).

There is little indication that the fortunes of this fishery will improve in the near future.

SHELLFISH: Geoduck/Horseclam

General Description

<i>Licence Designation</i>	G
<i>Nature of Licence</i>	Vessel based – vessel owner may make annual application for issuance of licence
<i>Number of Commercial Licences (valued in this study)</i>	52 licences 520 quota blocks
<i>No. of Communal Commercial Lic's (not valued in this study)</i>	3 licences 30 quota blocks
<i>Licensing/Management Framework</i>	Area Licensing: three areas, north coast, WCVI, and inside waters of Vancouver Island. Areas are selected annually. The number of licence eligibilities fishing each area may change annually according to the proportion of the total quota assigned to each area. Quota management with a pilot “quota block” system – each licence/quota block may harvest an equal share of the total quota (60,000 lbs per licence, or 6,000 lbs per quota block in 2012).
<i>Additional Information</i>	Dive fishery. 10 quota blocks per licence. Stacking allowed - 50 quota blocks maximum per licence. Vessel-based licence allows harvest of Schedule II species and transporting (packing).

Valuation Parameters

Valuations performed:	<ol style="list-style-type: none"> 1. G licence 2. Quota blocks (10 per licence, 6,000 lbs per block based on current TAC) 3. Annual lease rate (quota block) 4. Vessels
Basis for valuation:	PICFI retirements Anecdotal information
Confidence in valuation:	Low for licences and quota blocks; the new quota block system is in pilot phase so the valuation is tentative. Very low for leases, since a variety of lease arrangements are effected, and information is challenging to gather.

Current Valuation

Licence Value at March 31, 2012

Category	# Licences/ lbs quota	Value per Licence/ quota blk (\$)	Total Value (\$)
G Licence	52	300,000	15,600,000
Quota Blocks	520	325,000	169,000,000
Total Value			184,600,000

Note that 2 additional G licences were relinquished under the PICFI program subsequent to the March 31, 2012 valuation date.

Valuation Comments

Prior to this season, geoduck licences were non-divisible, with each of 55 licences receiving an equal share of the overall TAC. For 2012, a pilot program was introduced, with 10 quota blocks associated with each licences. Quota blocks are transferable. However, to fish geoduck, or hold geoduck quota blocks, a vessel must have a G licence.

A primary purpose of the pilot system is to facilitate enhanced First Nations participation in the fishery.

It is widely believed in the industry that the pilot program will be made permanent in future years.

The new licensing system is similar to the programs for halibut, sablefish, and groundfish trawl, in that two classes of asset are created: a licence (or tab), and quota. The primary distinction is that the groundfish IVQ fisheries are divisible in one-pound increments, while in the geoduck fishery, the quota is divided into blocks equivalent to 1/550th of the TAC.

While technically, individuals must possess a G licence to hold quota blocks, in practice a system of trust/joint venture arrangements is being devised (such systems are in place to skirt restrictions in certain other fisheries, too).

The value of G licence tabs (without quota) is in the \$300,000 to \$400,000 range. The low end of the range is chosen to reflect activity at the valuation date (March 31, 2012). There has been upward price pressure since then. A rationale expressed for the \$300,000 G tab valuation is that sablefish licences have traded at similar levels.

Values for individual quota blocks range from \$300,000 to \$400,000. This is based largely on anecdotal information.

Using the \$300,000 G licence figure and the \$325,000 quota block value, the indicated value for a “full” licence would be \$3.55 million. As indicated, the value of a “full” licence may have risen since the valuation date.

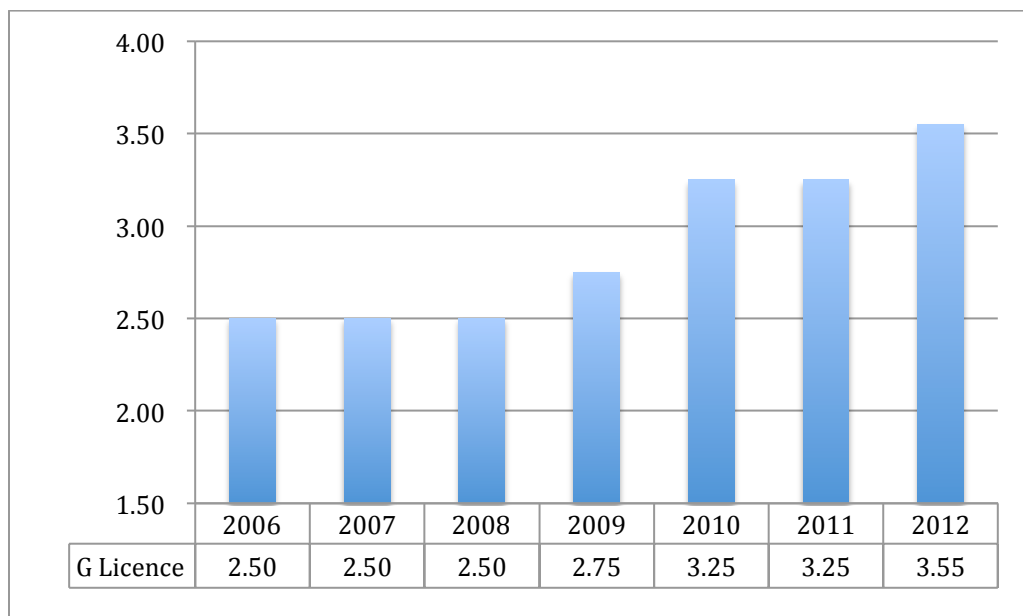
Vessel Value

Fleet composition is arrived at by using past data as a baseline. By nature, fleet vessel valuation is very imprecise and results should be used for general purposes only.

Geoduck	# Vessels	Avg Vessel Value (\$)	Aggregate Value (\$)
Classic Style	23	108,000	2,484,000
Modern Style	16	264,000	4,224,000
<i>Total</i>	39	172,000	6,708,000

Licensing Trends¹⁸

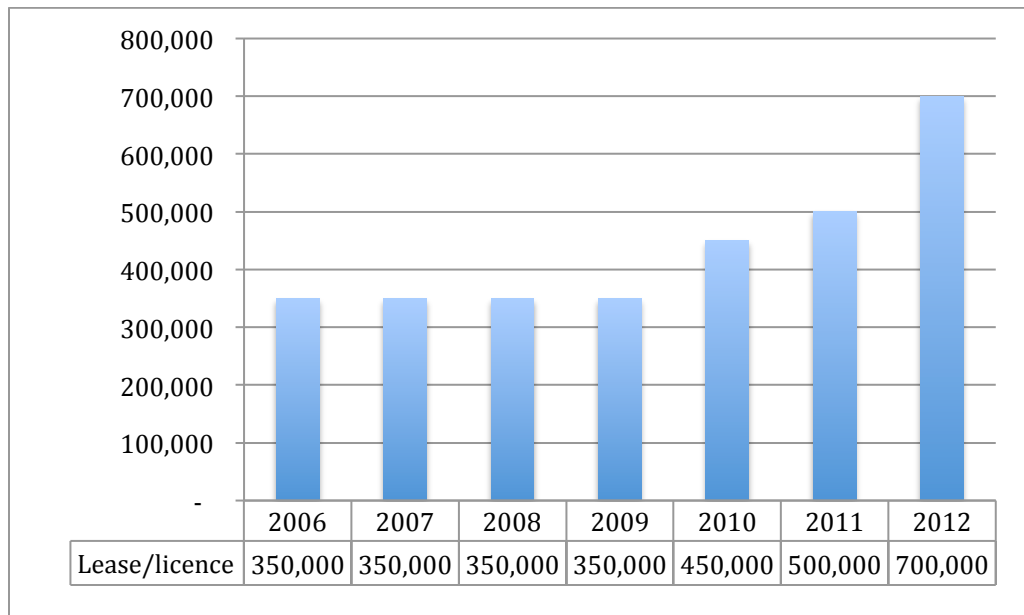
Recent G Licence Valuations (\$ millions)



Note that the 2012 valuation is for one G licence and 10 quota blocks, which is no longer the default configuration. The 2012 value is presented in this fashion for continuity purposes.

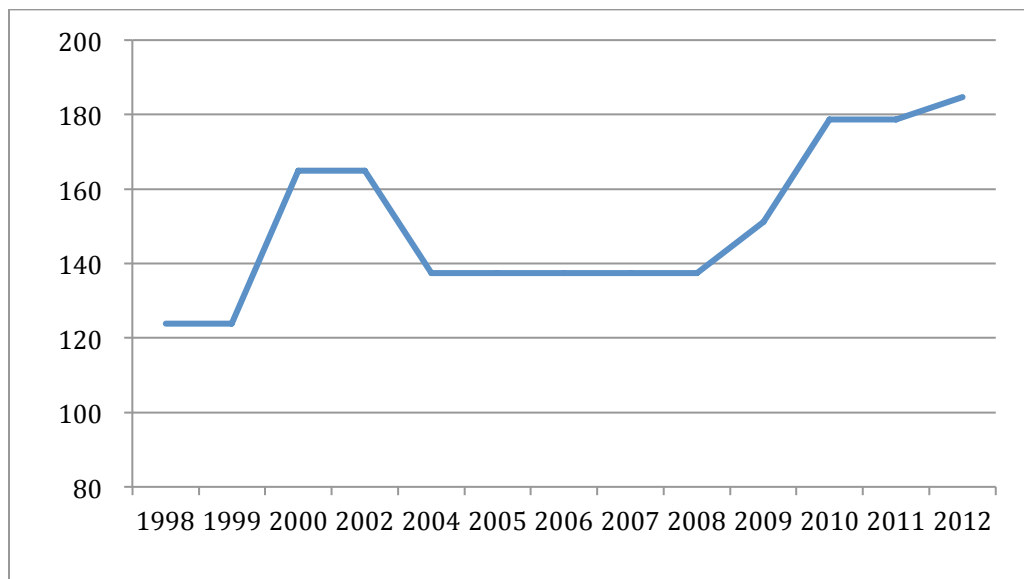
¹⁸ Values in charts are in nominal terms (not adjusted for inflation)

Recent G Licence Lease Rates (\$)

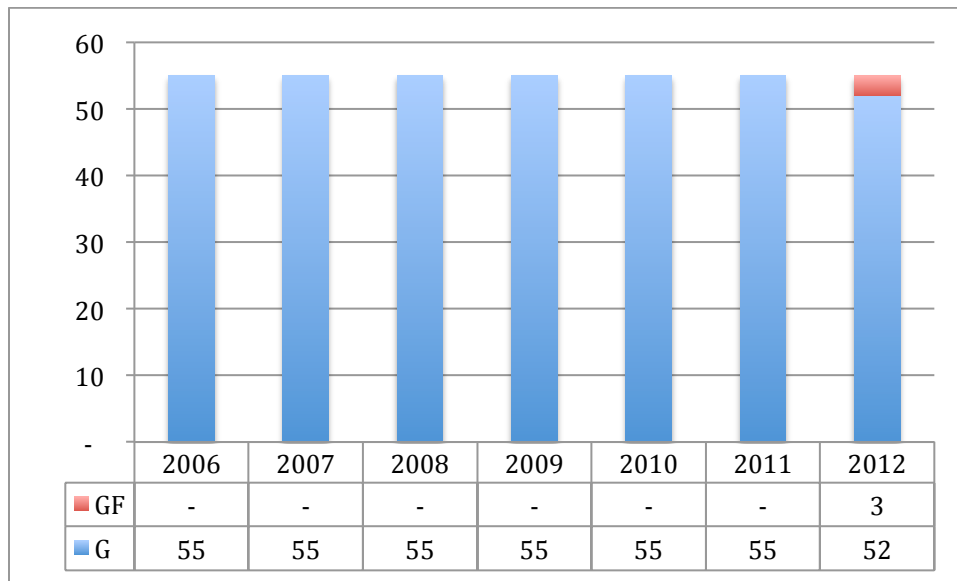


The lease rate shown for 2012 is for 10 quota blocks (a “full” licence). There is a wide range of potential lease rate values. Rising lease rates reflect rising prices at the ex-vessel level for geoduck.

Aggregate Value of G Licences (\$ millions by year)

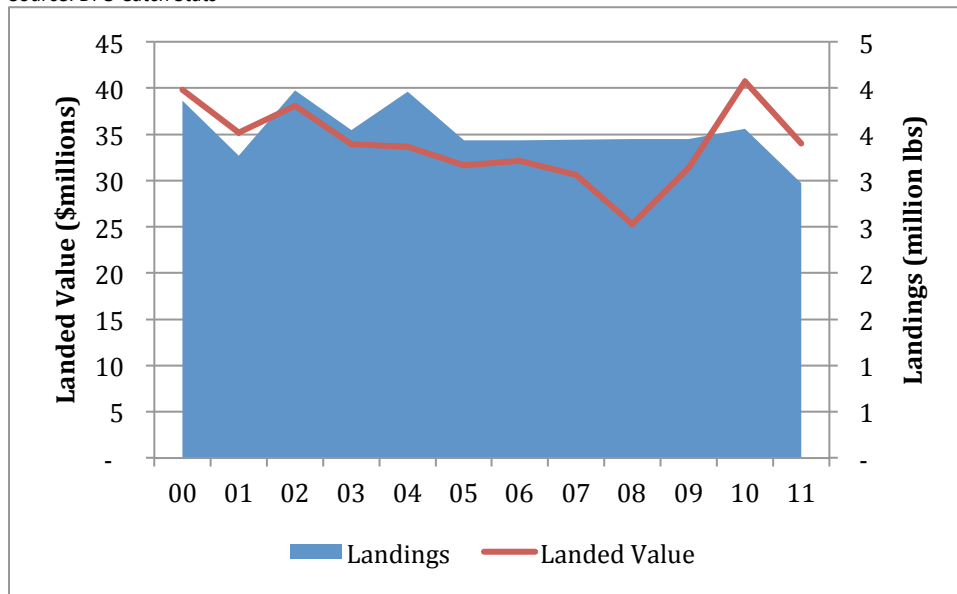


G Licence Counts by Category



Geoduck Landings & Landed Value Trends

Source: DFO Catch Stats



Outlook

While geoduck is one of the most profitable, and sought after, fisheries, there are nevertheless some areas for concern:

During the 2012 season there was a brief interruption in geoduck distribution in China, as some importers and custom brokers were arrested for evading duties.

The Mexican geoduck fishery, while producing a lower grade of product, has grown substantially in the last several years. There is the potential for impacts on BC prices.

The Alaskan geoduck fishery occasionally gluts the market with product, causing the BC fishery to accept lower prices, or interrupt production.

However, a recent market study concluded that the Chinese/Hong Kong market can still absorb more product, and is generally in a “short” position for product.

It is widely believed in the industry the pilot quota block program will be made permanent.

SHELLFISH: Sea Cucumber

General Description

<i>Licence Designation</i>	ZD
<i>Nature of Licence</i>	Party based – individual, corporation, or band may make annual application for issuance of licence
<i>Number of Commercial Licences (valued in this study)</i>	85
<i>No. of Communal Commercial Lic's (not valued in this study)</i>	0
<i>Licensing/Management Framework</i>	Quota management – each licence receives 1/85 of the allowable catch – 16,000 pounds (split weight) per licence under the current fishing plan Area Licensing – 4 areas: North, Central, WCVI, St. of Georgia Stacking allowed – maximum 5 licences per vessel
<i>Additional Information</i>	Quotas not divisible. Allowed harvest is set on a fixed precautionary rate: 4.2% of the estimated biomass; this has allowed for steadily growing quotas.

Valuation Parameters

Valuations performed:	1. ZD licence 2. Annual lease rate 3. Vessels
Basis for valuation:	Anecdotal information
Confidence in valuation:	Low

Current Valuation

Licence Value at March 31, 2012

Category	# Licences	Value/ Licence (\$)	Total Value (\$)
ZD Licences	85	500,000	42,500,000

Valuation Comments

Estimates of licence value range from \$400,000 to \$600,000 per licence.

No specific sales were found in researching this fishery.

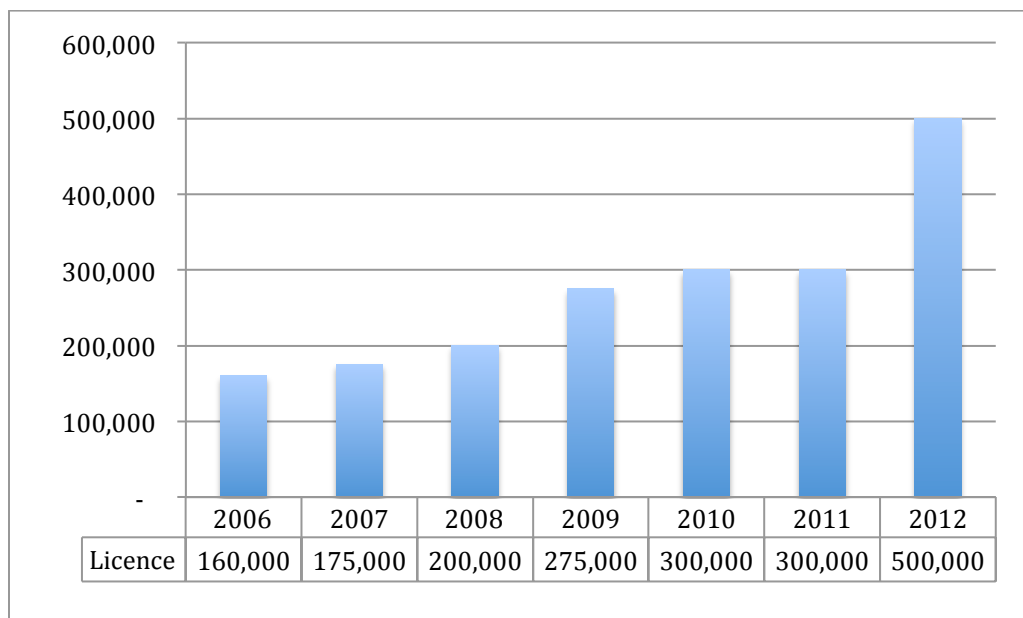
Vessel Value

Fleet composition is arrived at by using past data as a baseline. By nature, fleet vessel valuation is very imprecise and results should be used for general purposes only.

Sea Cucumber	# Vessels	Avg Vessel Value (\$)	Aggregate Value (\$)
Classic Style	12	108,000	1,296,000
Modern Style	18	264,000	4,752,000
<i>Total</i>	30	201,600	6,048,000

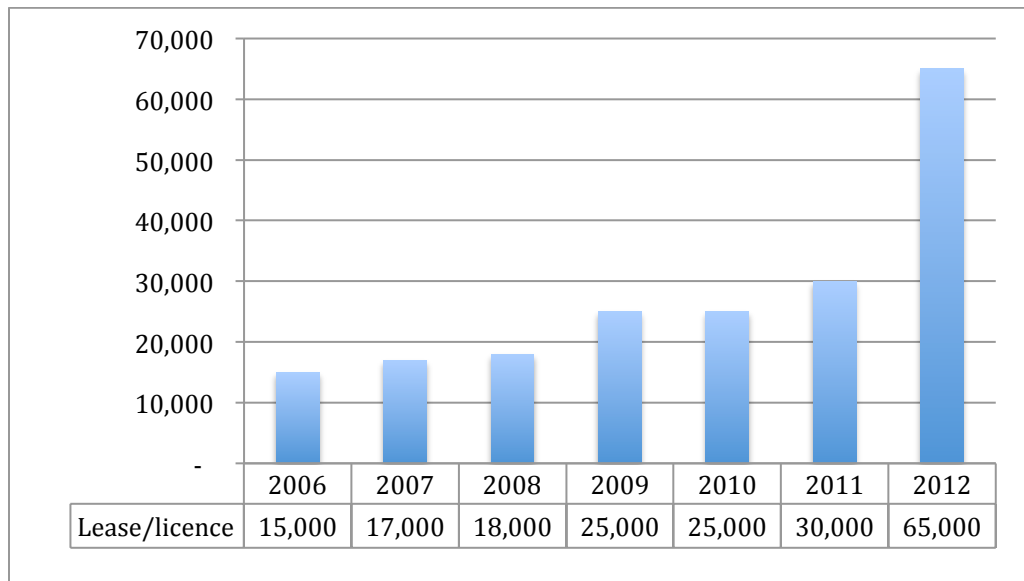
Licensing Trends¹⁹

Recent ZD Licence Valuations (\$)



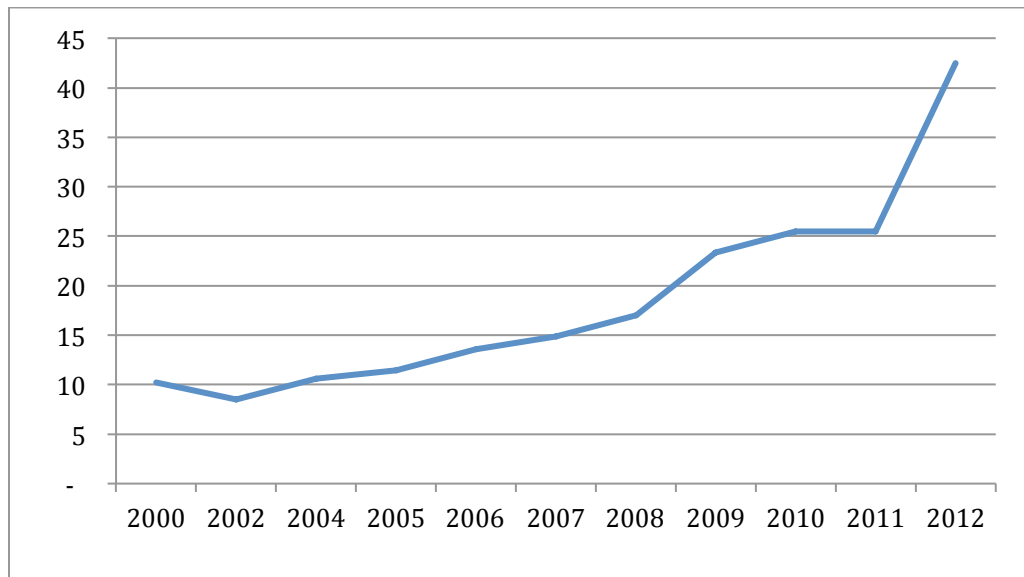
¹⁹ Values in charts are in nominal terms (not adjusted for inflation)

Recent ZD Licence Lease Rates (\$)



Lease rates in the \$60,000 to \$70,000 range per licence were reported.

Aggregate Value of ZD Licences (\$ millions by year)

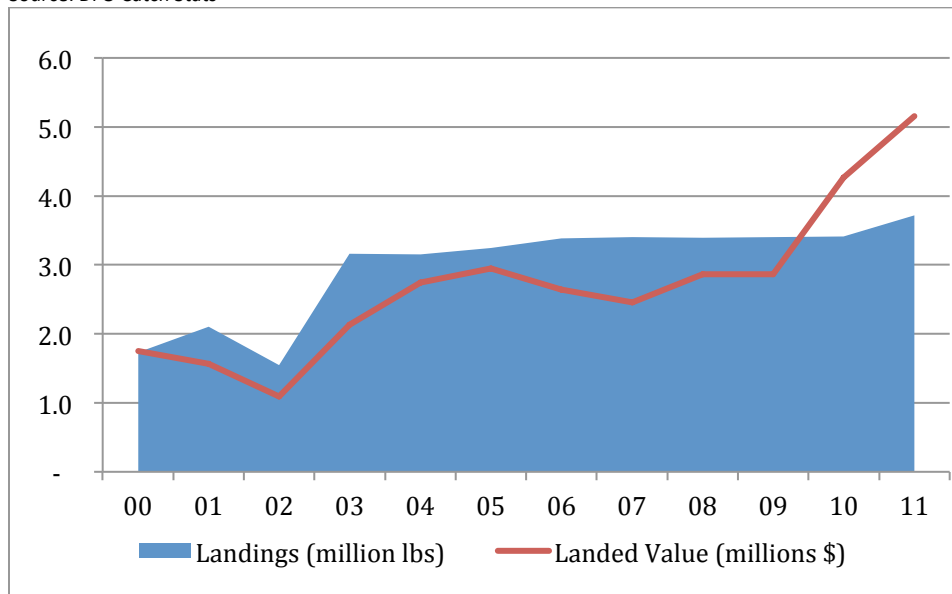


ZD Licence Counts by Category

No chart shown: all 85 licences are category ZD.

Sea Cucumber Landings & Landed Value Trends

Source: DFO Catch Stats



Outlook

The recent performance of the sea cucumber fishery has been extremely strong. TACs have been stable or rising and prices have been improving.

According to the IFMP, “as more portions of coastline are reopened in the future, it is possible that the TAC could increase further.”

The primary market for sea cucumber products is China.

There is some concern that the market could soften for the upcoming season, which could bring easing lease rates.

SHELLFISH: Red Sea Urchin

General Description

<i>Licence Designation</i>	ZC
<i>Nature of Licence</i>	Party based – individual, corporation, or band may make annual application for issuance of licence
<i>Number of Commercial Licences (valued in this study)</i>	85
<i>No. of Communal Commercial Lic's (not valued in this study)</i>	25 (FZC designation – Party-based)
<i>Licensing/Management Framework</i>	Quota management – average quota per licence for the 11/12 season approx 91,500 lbs; total quota approx 10 million lbs. Area Licensing – north and south coast. Quota for each area divided by the number of licences in the area to determine per-licence quotas. Stacking allowed – maximum 5 licences per vessel.
<i>Additional Information</i>	Quotas not divisible. Currently about 30 vessels fishing ZC licences. A lottery process is used for annual area selection.

Valuation Parameters

Valuations performed:	1. ZC licence 2. Annual lease rate 3. Vessels
Basis for valuation:	< 3 open market licence transactions Anecdotal information
Confidence in valuation:	Low to Moderate

Current Valuation

Licence Value at March 31, 2012

Category	# Licences	Value/Licence (\$)	Total Value (\$)
ZC Licences	85	40,000	3,400,000

Valuation Comments

This continues to be a depressed licence category.

Estimates of value and reports of transactions range from \$35,000 to \$50,000 per licence.

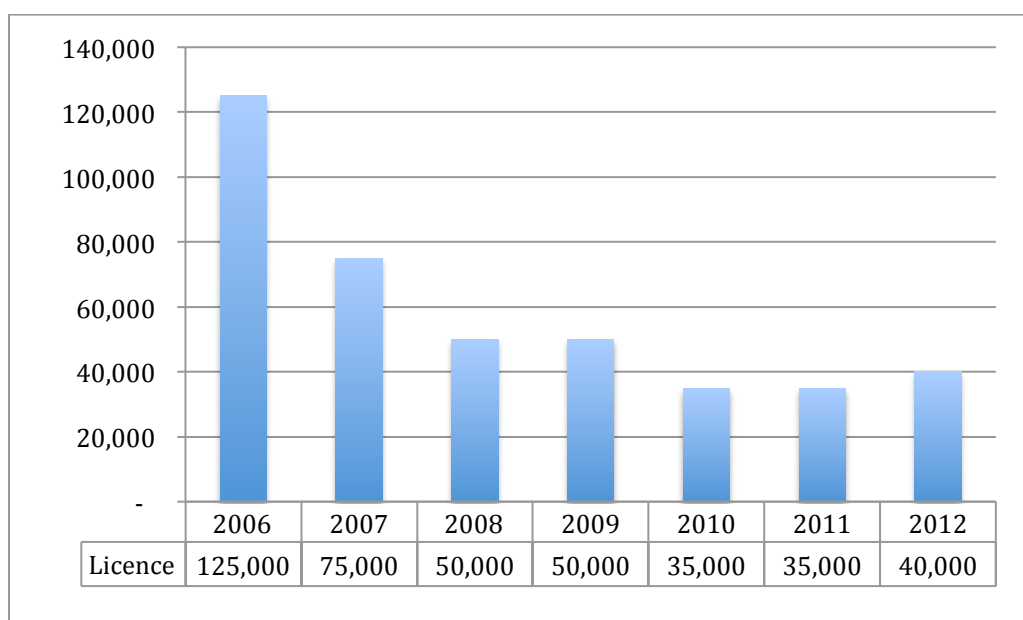
Vessel Value

Fleet composition is arrived at by using past data as a baseline. By nature, fleet vessel valuation is very imprecise and results should be used for general purposes only.

Red Sea Urchin	# Vessels	Avg Vessel Value (\$)	Aggregate Value (\$)
Classic Style	12	81,000	972,000
Modern Style	18	200,000	3,600,000
<i>Total</i>	30	152,400	4,572,000

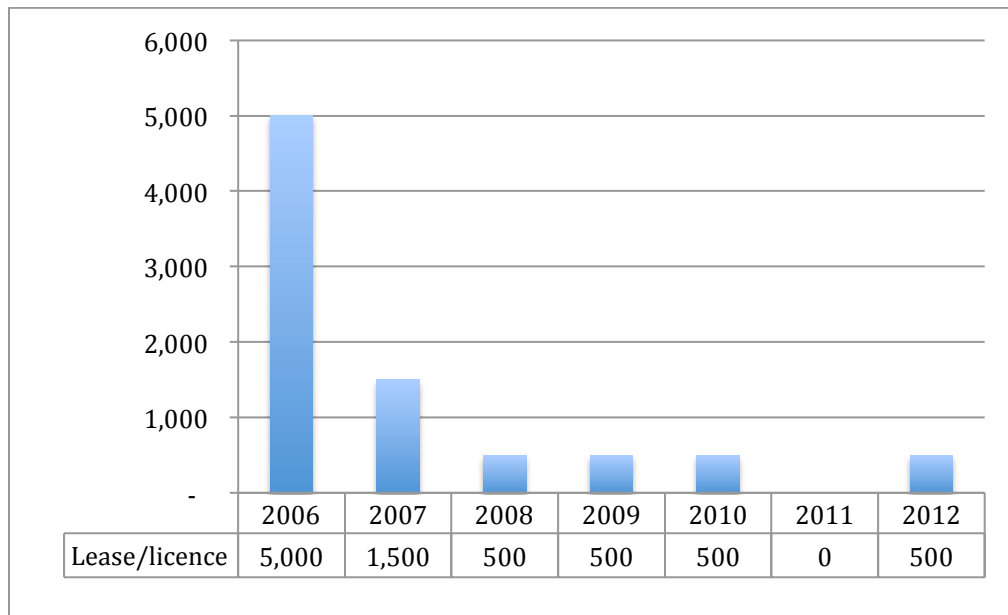
Licensing Trends²⁰

Recent ZC Licence Valuations (\$)



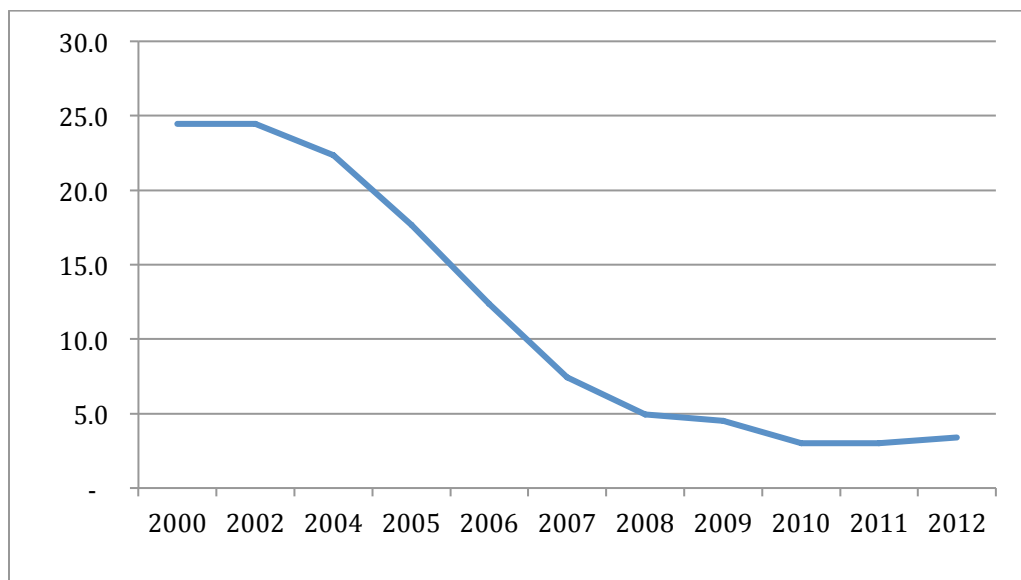
²⁰ Values in charts are in nominal terms (not adjusted for inflation)

Recent ZC Licence Lease Rates (\$)

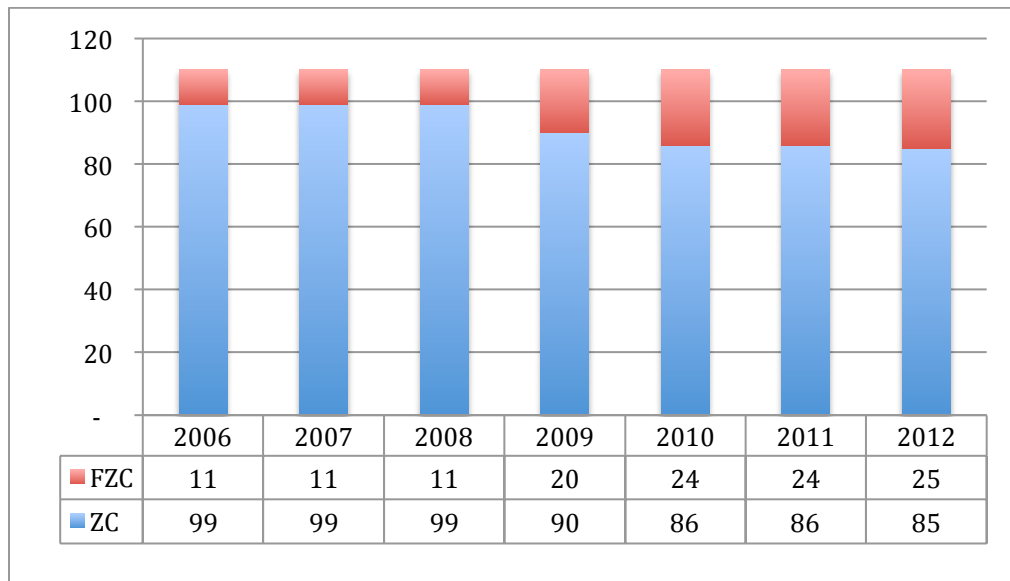


Many leases are at zero-value (fees only) but there are also reports of leases ranging from \$500 to \$1,500 per licence.

Aggregate Value of ZC Licences (\$ millions by year)

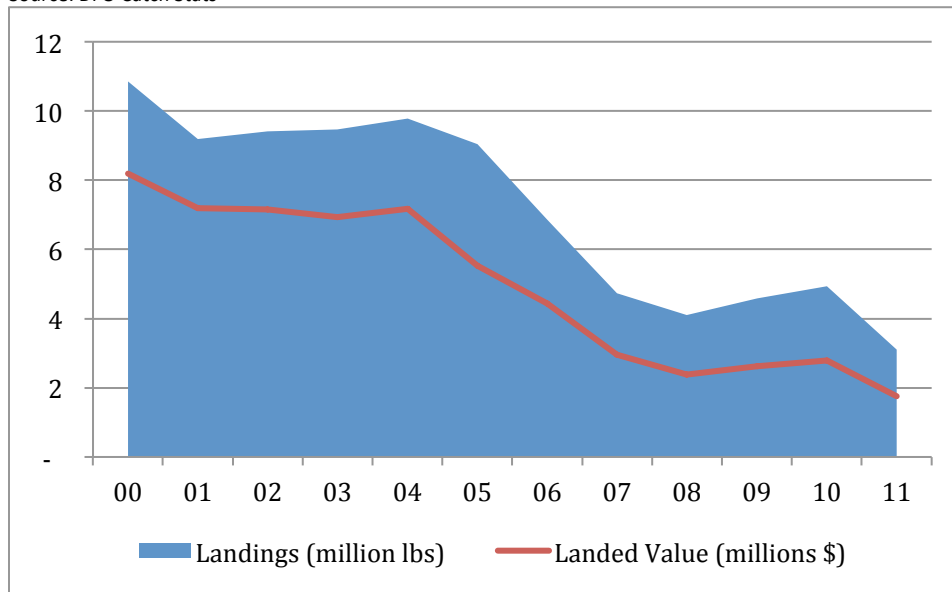


ZC Licence Counts by Category



Red Sea Urchin Landings & Landed Value Trends

Source: DFO Catch Stats



Outlook

The red sea urchin fishery continues to be impacted by the illegal Russian fishery, supplying Japan with a glut of product.

Red sea urchin fishery participants remain concerned about the impact of sea otters on urchin stocks.

While overall results remain poor—less than ½ of the TAC was harvested in 2011—there are some who believe a rebound of sorts is in progress.

Fishermen willing to work hard and harvest several ZC licences can make a reasonable income, but there is not enough margin in the fishery to provide yields to those that wish to lease-out licences.

SHELLFISH: Green Sea Urchin

General Description

<i>Licence Designation</i>	ZA
<i>Nature of Licence</i>	Party based – individual, corporation, or band may make annual application for issuance of licence
<i>Number of Commercial Licences (valued in this study)</i>	49
<i>No. of Communal Commercial Lic's (not valued in this study)</i>	0
<i>Licensing/Management Framework</i>	Quota management – each licence receives an equal share of the TAC – 9,126 pounds per licence under current fishing plan (447,174 lbs coastwide). Area Licensing – the bulk of quota is allocated to five areas (in the Johnstone Strait and lower Strait of Georgia) Stacking allowed – maximum 5 licences per vessel.
<i>Additional Information</i>	The fishing season is Sept 1 to August 31. Quotas not divisible Currently 19 vessels (est.) fishing 49 licences.

Valuation Parameters

Valuations performed:	ZA licence Annual lease rate Vessels
Basis for valuation:	Anecdotal information
Confidence in valuation:	Low

Current Valuation

Licence Value at March 31, 2012

Category	# Licences	Value/ Licence (\$)	Total Value (\$)
ZA Licences	49	25,000	1,225,000

Valuation Comments

Little or no market activity in this category.

Estimates of value range from \$15,000 to \$30,000 per licence.

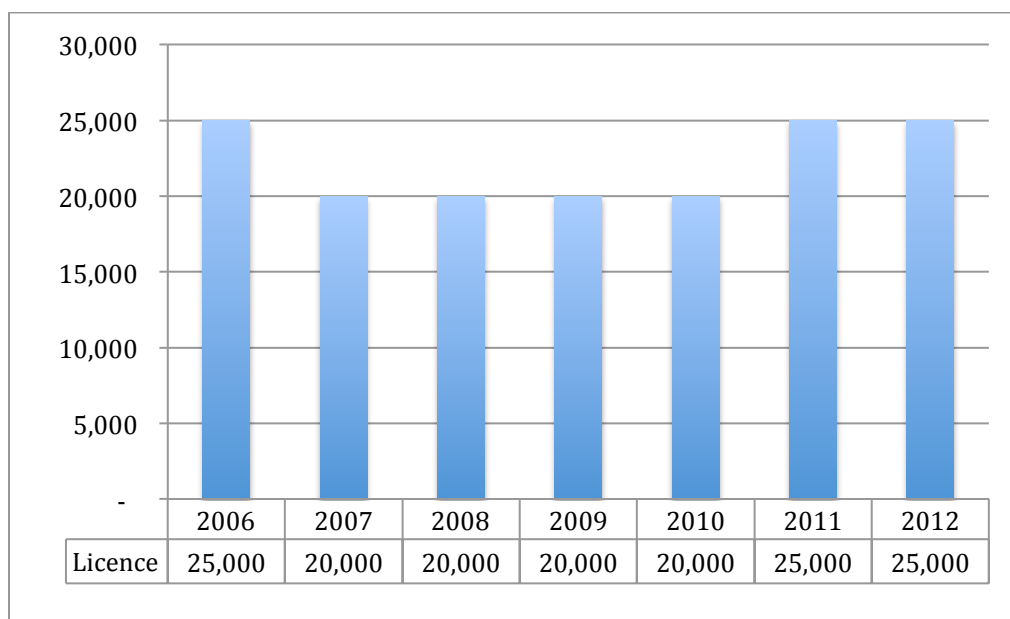
Vessel Value

Vessel counts exclude F licences. Fleet composition is arrived at by using past data as a baseline. By nature, fleet vessel valuation is very imprecise and results should be used for general purposes only.

Green Sea Urchin	# Vessels	Avg Vessel Value (\$)	Aggregate Value (\$)
Classic Style	6	81,000	486,000
Modern Style	9	200,000	1,800,000
<i>Total</i>	15	152,400	2,286,000

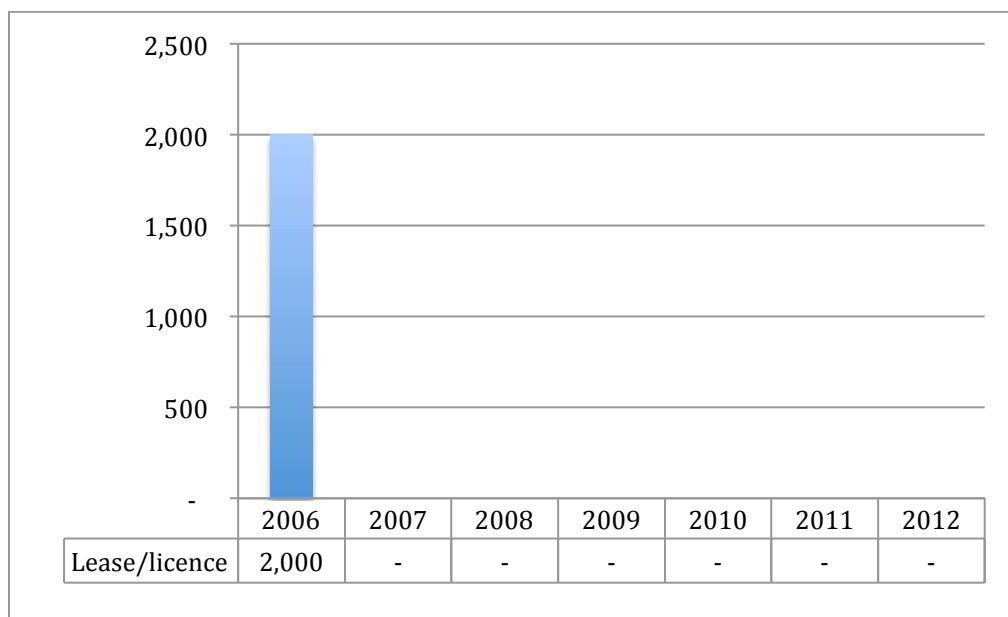
Licensing Trends²¹

Recent ZA Licence Valuations (\$)



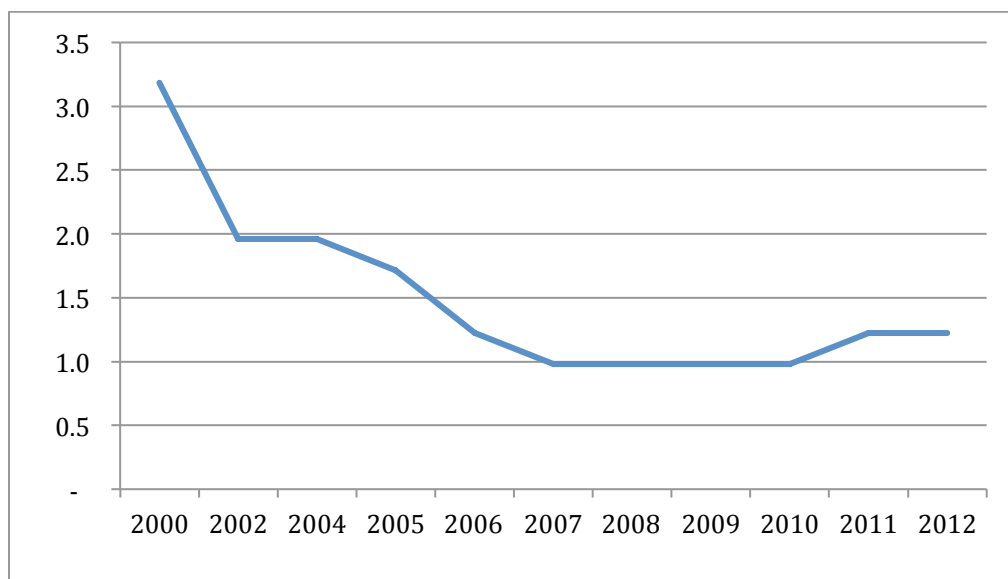
²¹ Values in charts are in nominal terms (not adjusted for inflation)

Recent ZA Licence Lease Rates (\$)



No concrete lease values were unearthed; leases tend to be on revenue sharing arrangements.

Aggregate Value of ZA Licences (\$ millions by year)

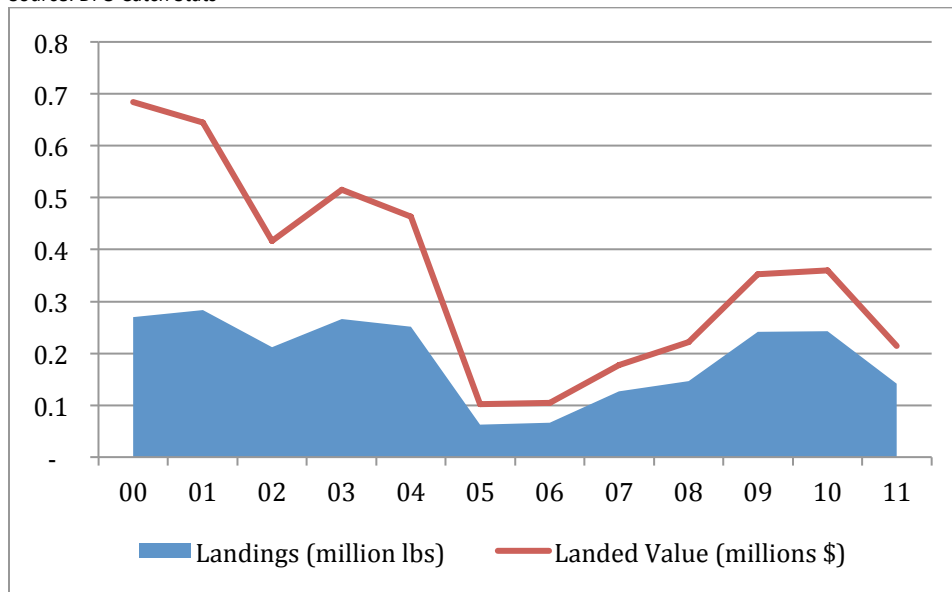


Licence Counts by Category

No chart shown: all 49 licences are category ZA.

Green Sea Urchin Landings & Landed Value Trends

Source: DFO Catch Stats



Outlook

The green sea urchin fishery continues to be impacted by the illegal Russian fishery, supplying Japan with a glut of product.

Green sea urchin fishery participants remain concerned about the impact of sea otters on urchin stocks.

There appears to have been little change in the overall economics of this fishery for the past few seasons.

SHELLFISH: Euphausiid

General Description

<i>Licence Designation</i>	ZF
<i>Nature of Licence</i>	Party based – individual, corporation, or band may make annual application for issuance of licence
<i>Number of Commercial Licences (valued in this study)</i>	18
<i>No. of Communal Commercial Lic's (not valued in this study)</i>	1 (FZF designation)
<i>Licensing/Management Framework</i>	Competitive plankton (krill) fishery using trawl gear. Vessels vie for share of the annual 500 ton TAC.
<i>Additional Information</i>	Fishery primarily in mainland inlets of Georgia Strait

Valuation Parameters

Valuations performed:	1. ZF licence 2. Vessels
Basis for valuation:	< 3 open market transactions Anecdotal information
Confidence in valuation:	Low

Current Valuation

Licence Value at March 31, 2012

Category	# Licences	Value/ Licence (\$)	Total Value (\$)
ZF Licences	18	30,000	540,000

Valuation Comments

Valuation estimates range from \$15,000 to \$40,000 per licence.

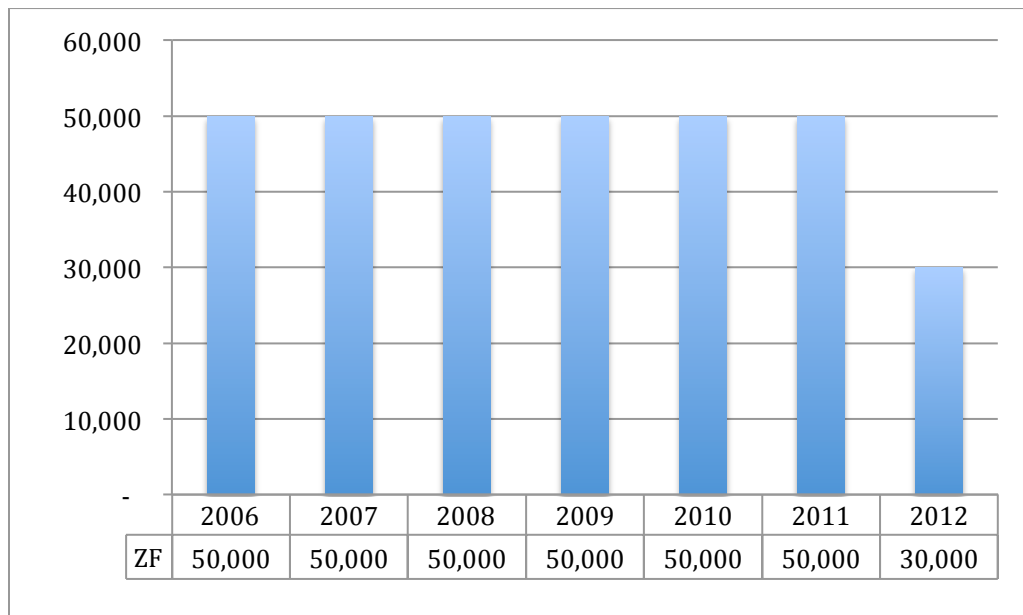
Vessel Value

Vessel counts exclude F licences. Fleet composition is arrived at by using past data as a baseline. By nature, fleet vessel valuation is very imprecise and results should be used for general purposes only.

Euphausiid	# Vessels	Avg Vessel Value	Aggregate Value
Classic Style	4	120,000	480,000
Modern Style	7	567,000	3,969,000
<i>Total</i>	11	404,455	4,449,000

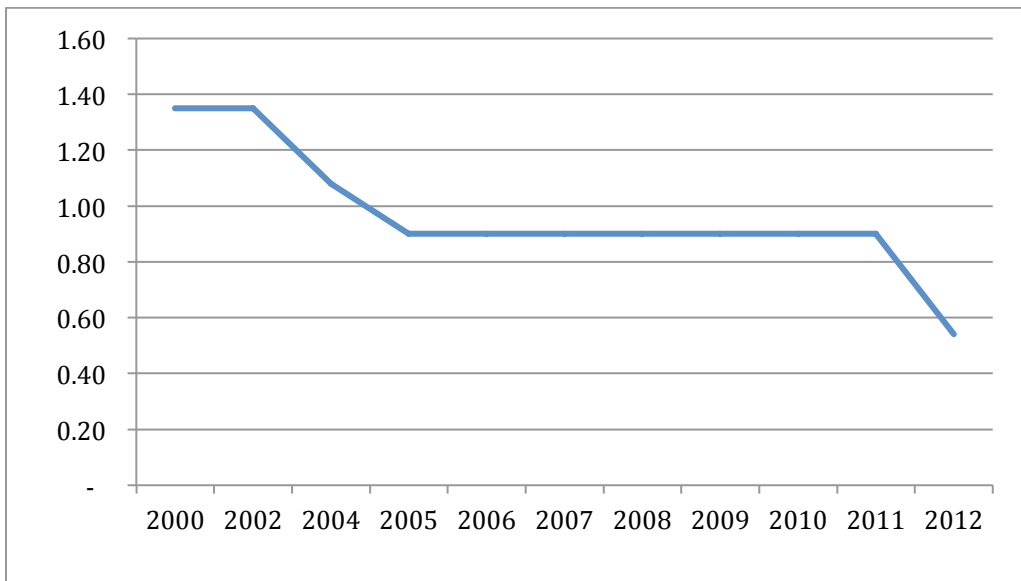
Licensing Trends²²

Recent ZF Licence Valuations (\$)

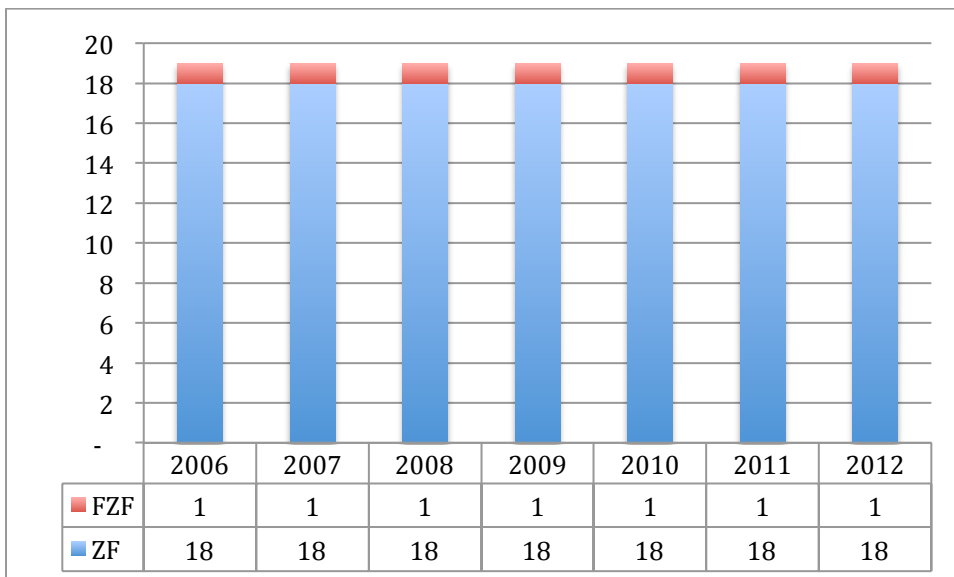


²² Values in charts are in nominal terms (not adjusted for inflation)

Aggregate Value of ZF Licences (\$ millions by year)

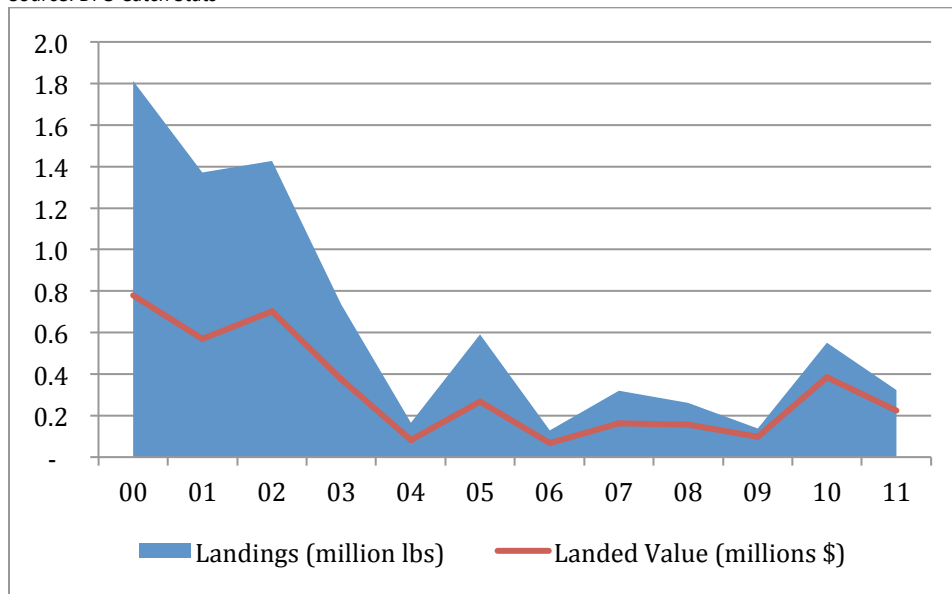


Licence Counts by Category



Euphausiid Landings & Landed Value Trends

Source: DFO Catch Stats



Outlook

This is a very small-scale fishery with sporadic participation and marginal returns to harvesters.

No change in the outlook for the fishery was reported by informants.

Schedule II Species

General Description

<i>Licence Designation</i>	C
<i>Nature of Licence</i>	Vessel based – vessel owner may make annual application for issuance of licence
<i>Number of Commercial Licences (valued in this study)</i>	456
<i>No. of Communal Commercial Lic's (not valued in this study)</i>	12 (FC designation – Party-based)
<i>Licensing/Management Framework</i>	Allows participation in Schedule II fisheries and transporting. Various time, area, gear, TAC, trip limit, and IVQ measures in place.
<i>Additional Information</i>	One C licence (or FC) per vessel. C licence cannot be held on a vessel with any other vessel based licence in most circumstances. List of Schedule II species: Smelt, Spiny Dogfish, Skate, Sole & Flounder, Pacific Cod, Lingcod & Tuna (Canadian & International Waters only). Dogfish and lingcod operating under groundfish integration program.

Valuation Parameters

Valuations performed:	1. C licence 2. Vessels
Basis for valuation:	< 10 open market transactions Anecdotal information
Confidence in valuation:	Moderate

Current Valuation

Licence Value at March 31, 2012

Category	# Licences	Value/ Licence Ft (\$)	Total Value (\$)
C Licences	456	225	3,488,400

Valuation Comments

Transactions range from \$150 to \$450 per foot.

These licences are sometimes acquired and then relinquished to allow un-marrying of vessel based licences.

No valuation information for leasing of F category C licences was uncovered.

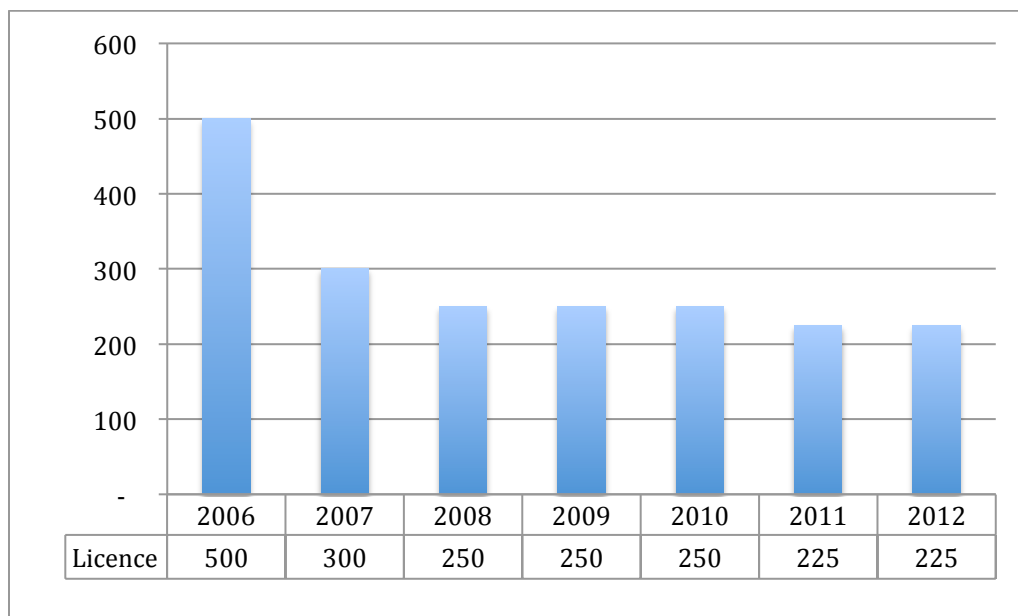
Vessel Value

Vessel counts exclude F licences. Fleet composition is arrived at by using past data as a baseline. By nature, fleet vessel valuation is very imprecise and results should be used for general purposes only.

Schedule II	# Vessels	Avg Vessel Value (\$)	Aggregate Value (\$)
Classic Style	257	40,000	10,280,000
Modern Style	139	143,000	19,877,000
<i>Total</i>	396	76,154	30,157,000

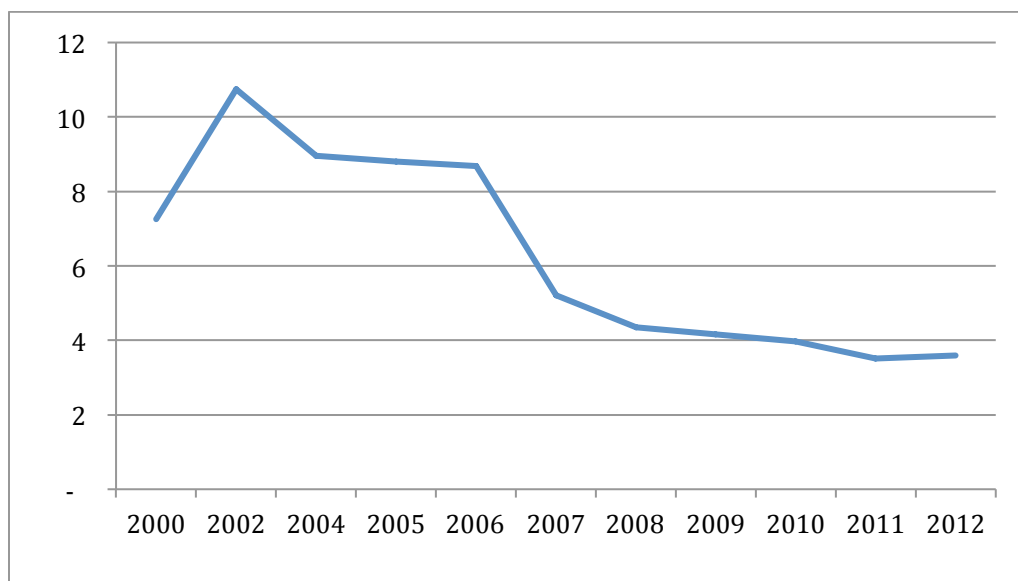
Licensing Trends²³

Recent C Licence Valuations (\$ per foot)



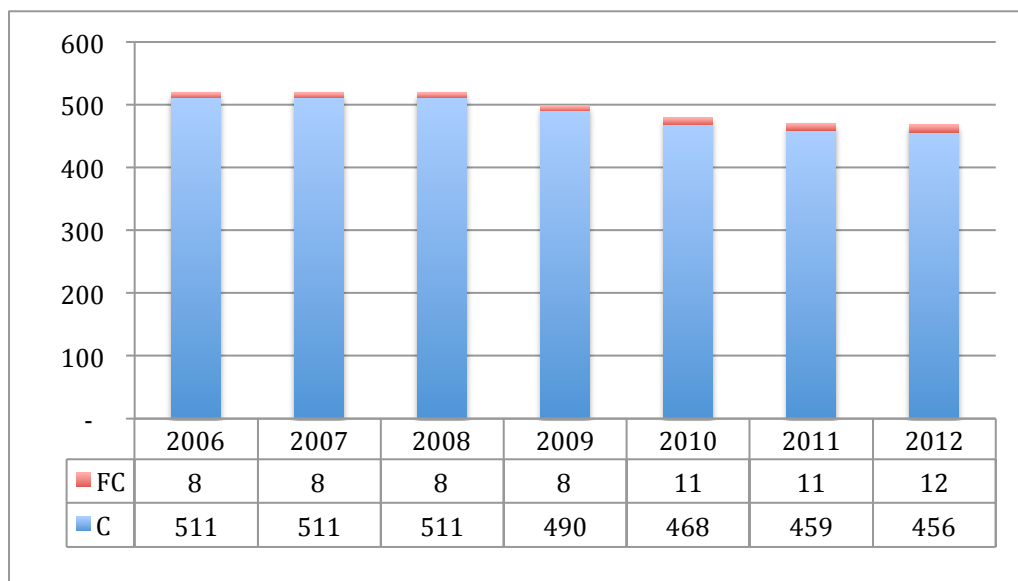
²³ Values in charts are in nominal terms (not adjusted for inflation)

Aggregate Value of C Licences (\$ millions by year)



The value of licences in this category has declined appreciably, driven by both falling licence prices, and a diminishing pool of C licences (caused by licences being extinguished).

Licence Counts by Category



Landings & Landed Value Trends

No information is provided, since a wide range of species may be landed under Schedule II licences.

Outlook

C licences bring few fishing rights. Some participants think that this category could disappear.

Summary

Aggregate Value of Licences and Quota at March 31, 2012

Fishery Grouping	Fishery	Licence Designation	# Licences	Aggregate Licence Value (\$ millions)	Average Licence Value (\$)	Aggregate Quota Value (\$millions)	Total Licence & Quota Value (\$ millions)
Salmon	Seine	AS	212	57.7	272,170	-	57.7
	Gillnet	AG	875	46.7	53,423	-	46.7
	Troll	AT	459	50.3	109,608	-	50.3
Pelagics	Herring – Roe Seine	HS	245	27.4	111,939	-	27.4
	Herring – Roe Gillnet	HG	1,101	37.2	33,742	-	37.2
	Herring - Spawn on Kelp	J	36	7.2	200,000	-	7.2
	Tuna	USA 68	110	-	-	-	0.0
	Sardine	ZS	25	6.3	250,000	-	6.3
Groundfish	Halibut	L	348	22.2	63,900	324.3	346.5
	Sablefish	K	43	11.8	275,000	166.2	178.0
	Groundfish Trawl	T	137	12.9	94,500	231.9	244.9
	Rockfish Inside	ZN	58	1.5	25,000	-	1.5
	Rockfish Outside	ZN	164	23.0	140,000	-	23.0
	Lingcod Hook & Line			-	-	21.4	21.4
	Dogfish Hook & Line			-	-	4.2	4.2
Shellfish	Prawn	W	197	136.6	693,500	-	136.6
	Crab	R	194	136.6	704,000	-	136.6
	Shrimp	S	221	7.2	32,800	-	7.2
	Geoduck	G	52	184.6	3,550,000	-	184.6
	Sea Cucumber	ZD	85	42.5	500,000	-	42.5
	Red Sea Urchin	ZC	85	3.4	40,000	-	3.4
	Green Sea Urchin	ZA	49	1.2	25,000	-	1.2
	Euphausiid	ZF	18	0.5	30,000	-	0.5
Schedule II	Schedule II Species	C	456	3.5	7,650	-	3.5
				\$820		\$748	\$1,568