

An Analysis of:

**COMMERCIAL FISHING LICENCE, QUOTA,
AND VESSEL VALUES**

As at March 31, 2007

WEST COAST FISHING FLEET

Prepared for:

FISHERIES AND OCEANS - PACIFIC REGION
Treaty and Aboriginal Policy Directorate

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CONTENTS

Introduction	1
Highlights: Year Ending March 31, 2007	2
Methodology	4
Salmon Seine	9
Salmon Gillnet	13
Salmon Troll	17
Roe Herring Seine	21
Roe Herring Gillnet.....	25
Herring Spawn on Kelp	29
Halibut	32
Sablefish (Black Cod)	37
Geoduck / Horseclam.....	41
Shrimp (Trawl)	45
Prawn (Trap)	49
Groundfish Trawl	53
Crab	58
Sea Cucumber	62
Red Sea Urchin.....	66
Green Sea Urchin	70
Rockfish Hook & Line	74
Schedule II Species	79
Euphausiid	82
Summary	85

PACIFIC FLEET VESSEL, LICENCE AND QUOTA VALUATION – AT MARCH 31, 2007

INTRODUCTION

This report offers assessments of licence, quota, lease, and vessel values as of March 31, 2007 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 dramatically by fishery - some fisheries are active, with ample vessel and licence transactions, while others are very closely held. 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.

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, 2007 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.

HIGHLIGHTS: YEAR ENDING MARCH 31, 2007

Key findings during the year are briefly identified as follows:

Appreciating Canadian Dollar, Rising Fuel Prices

- The vast majority of BC seafood is exported, and the USA is now BC's largest export market. As the Canadian dollar has steadily risen in value relative to the US dollar, there has been substantial downward pressure on the effective price received by BC producers. Lower revenues in many fisheries has had a moderating impact on licence and quota values during the year.
- The rising cost of fuel is another element that has mitigated financial results for the BC harvesting sector. Rising operating costs in the face of declining revenues contributes to a "margin squeeze" for many producers.

Salmon Fishery

- Licence values remain relatively stable, surprising in light of continued poor financial performance experienced by the bulk of the fleet. Licence values are supported somewhat by ATP purchases/retirements (17 gillnet licences, 3 seine licences, 1 troll licence) and expectation of further government-funded licence retirements related to pending Treaty Settlement.

Herring & Spawn-on-Kelp Fisheries

- A dismal 2006 roe herring season saw licence values plummet in 2006. This precipitous decline was only partially captured in the March 31, 2006 Valuation Report (because of the timing of the report). Firming prices for 2007 production resulted in a modest rebound in roe herring licence values from their lows of 2006 and early 2007.
- Prices paid for SOK to J licence holders improved dramatically in 2007 vs. the prior couple of years, from an average of perhaps \$7 per pound to around \$15 per pound. This will have a strongly positive impact on SOK operations and, presumably, licence values, though a prohibition on purchases/sales makes valuation imprecise.

Groundfish Fisheries

- The trawl fishery has seen a marked erosion in quota values, due to poor financial performance exacerbated by a strong Canadian dollar (meaning lower prices for finished products) and escalating operating costs (fuel).
- Halibut and sablefish values have remained reasonably stable, with halibut strengthening slightly and sablefish softening slightly.
- Groundfish integration is resulting in shifting quota lease markets in all the groundfish fisheries (trawl, halibut, sablefish, rockfish hook & line, dogfish, ling cod). Trawl quota is increasingly leased in individual species lots, vs. multi-species parcels. Quota trades occur between fishery sectors, often at premiums over transaction rates within a sector.

Crab and Prawn

- These fisheries remain highly active licence categories, with many transactions at high price levels. High valuations are not necessarily supported by operating results, however. The prawn fishery saw a significant drop in ex-vessel prices in 2007, somewhat offset by strong catch levels.

Red and Green Urchins

- Circumstances in these fisheries have continued to deteriorate, with sporadic participation in the fishery by licence holders in the 2007 season, dropping licence values, and “flat-lining” lease rates.

Leasing of Commercial Communal (F) Licences

- Licences issued to First Nations (after being retired from industry under the Allocation Transfer Program) are not bound by the usual “vessel-based” licence constraints. First Nations communities have the option of leasing-out F licences (to First Nations or non-First Nations operators). For fisheries such as salmon and crab, where licence leasing is otherwise difficult and rare, a “new” lease market is emerging.

Subsequent Event: Pacific Integrated Commercial Fisheries Initiative (PICFI)

- In the summer of 2007 a federal program was announced that will provide significant new funding for the purchase and transfer of commercial fishing capacity (licences and quota) to First Nations.
- It is expected that program will allocate about \$20-25 million per year over the next five years for the purchase of licences and quota.
- Individuals consulted during this year’s study believe that the PICFI program will undoubtedly shore-up (positive take) or inflate (negative take) the licence/quota market in the years to come.

METHODOLOGY

Valuations Performed

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

Fishery	Gear	VALUATION				
		Average Vessel Value	Average Licence Value		Quota	Lease
			Full Fee	Reduced Fee	Value	Value
Salmon	Seine	X	X	X		
	Gillnet	X	X	X		
	Troll	X	X	X		
Herring – Roe	Seine	X	X	X		X
	Gillnet	X	X	X		X
Herring – Spawn on Kelp			X			
Halibut	Longline	X	X		X	X
Sablefish	Longline / Trap	X	X		X	X
Geoduck / Horseclam	Dive	X	X			X
Shrimp	Trawl	X	X			
Prawn	Trap	X	X			X
Groundfish	Trawl	X	X		X	X
Crab	Trap	X	X			
Sea Cucumber	Dive	X	X			X
Red Sea Urchin	Dive	X	X			X
Green Sea Urchin	Dive	X	X			X
Rockfish	Hook & Line	X	X			X
Schedule II Species		X	X			
Euphausiid	Trawl	X	X			

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 of similar value. An average value is then determined for each group rather than each vessel (or licence).

Licence Stratification & Valuation Criteria

Licence stratification is generally quite simple, as each licence within a fishery tends to hold a similar value. Exceptions are fisheries such as salmon and roe herring, where “full-fee” and “reduced-fee” licence distinctions bring different values.

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

Vessel Stratification

Compared to licence valuation, vessel valuation is complex and by nature, imprecise.

The vessel stratification approach used in this study strives to provide a meaningful profile of the vessels involved in each fishery. The following table shows the vessel categorizations applied to each commercial fishery:

Vessel Type	Classic Style			Modern Style	
	Wood	Aluminium / Fibreglass	Steel	Aluminium / Fibreglass	Steel
Inside Waters / Smaller Vessel					
Outside Waters / Larger Vessel					

The stratification approach is described as follows:

Vessel Type

For each fishery, it is deemed that there is a “small” class of vessels, and a “large” class of vessels. Smaller vessels are typically designed for and utilized in inside or protected waters, while larger vessels may be further utilized in outside, exposed, or offshore waters. An outside/larger vessel, being of greater size and utility, is more valuable than its inside/smaller counterpart.

Vessel-type designations are *relative*, being specific to the fishery being considered. For instance, an inside/smaller groundfish trawl vessel may actually be larger and possess greater value than an outside/larger salmon gillnetter.

Examples of inside/smaller vessels are Skeena River gillnet boats, Boundary Bay crab boats, or “Gulf” trollers. Examples of outside/larger vessels are “San Juan” salmon seiners, west-coast salmon trollers, and Queen Charlotte Islands crab vessels.

Vessel “Style”

For each type of vessel there are two “styles” assumed: “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.

In decades past, wood was the default construction material. As materials like steel, fibreglass, and aluminium gained favour, vessels were built with new materials, but using a similar design as in the past. Thus, there is a sizeable class of “classic” vessels constructed from non-wood materials.

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 1990’s.

Vessel Construction Material

Four construction materials are considered: wood, fibreglass, aluminium, and steel. All else being equal (vessel type and style), it is deemed that wood vessels command the least value, fibreglass and aluminium are next (with the two materials assumed equal in value), with steel vessels being the most valuable.

Vessels constructed of miscellaneous materials (ferro, composite) are assumed to hold the same value as wooden craft.

Vessel Stratification Intent

The vessel stratification method used in this study seeks to find a balance between undue complexity (too many classifications, or *individual* vessel valuations) and over-simplicity (glossing over relevant differences). Application of this approach will yield meaningful *overall results* (for example, *total fleet value*, *average vessel value*), but is not intended to provide definitive *by-vessel* valuations.

Information Collection

This report follows a similar valuation methodology to that applied in prior reports. Valuations were 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. There is seldom a “going rate” for licences. 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 collected, current fishery trends, and past price levels; valuations with a low reported confidence level are on this basis.

Valuation Trends

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

Average Landings and Landed Value

For each fishery where landings and landed value trends are shown, the average volume and catch per licence, for the most current year, is provided. Except where noted, data is from the DFO Catch Data Unit. For some quota fisheries or fisheries where licence stacking is allowed, these values will not provide a true picture of per-vessel activity; some vessel owners have consolidated quota/licence holdings, while others have partially or totally divested.

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-ops2.pac.dfo-mpo.gc.ca/content/mplans.htm>
- DFO Licensing: <http://www-ops2.pac.dfo-mpo.gc.ca/xnet/content/MPLANS/MPlans.htm>

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>	246
<i>No. of Commercial Communal Lic's (not valued in this study)</i>	30 (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>Valuation Criteria (Stratification)</i>	Full fee and reduced fee licences are valued separately. No difference in value between licence areas was found. Vessels are stratified by size, construction material, and capability.
<i>Additional Information</i>	Competitive fishery. 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).

Valuations Performed

Valuations	Purchase and Sale			Lease		
	<i>Valuation Conducted?</i>	<i>Sample Size</i>	<i>Confidence Level</i>	<i>Valuation Conducted?</i>	<i>Sample Size</i>	<i>Confidence Level</i>
Licence	Yes	3-5	Low-Med	n.a.		
Quota	n.a.			n.a.		
Vessel	Yes	<3	Low	n.a.		

Current Valuation

Licence Value at March 31, 2007

Licence Category	Avg. Licence Value (\$)	Total Licences	Total Value, All Licences (\$millions)
AS - Full Fee	320,000	228	72,960,000
AS - Reduced Fee	275,000	18	4,950,000
AS Licences	316,707	246	77,910,000

Valuation Considerations

- Estimates of value \$320,000 - \$370,000.
- Very few industry transactions. At current values, most licence holders appear content to hold on and wait (hope?) for better times.

Valuation Comments

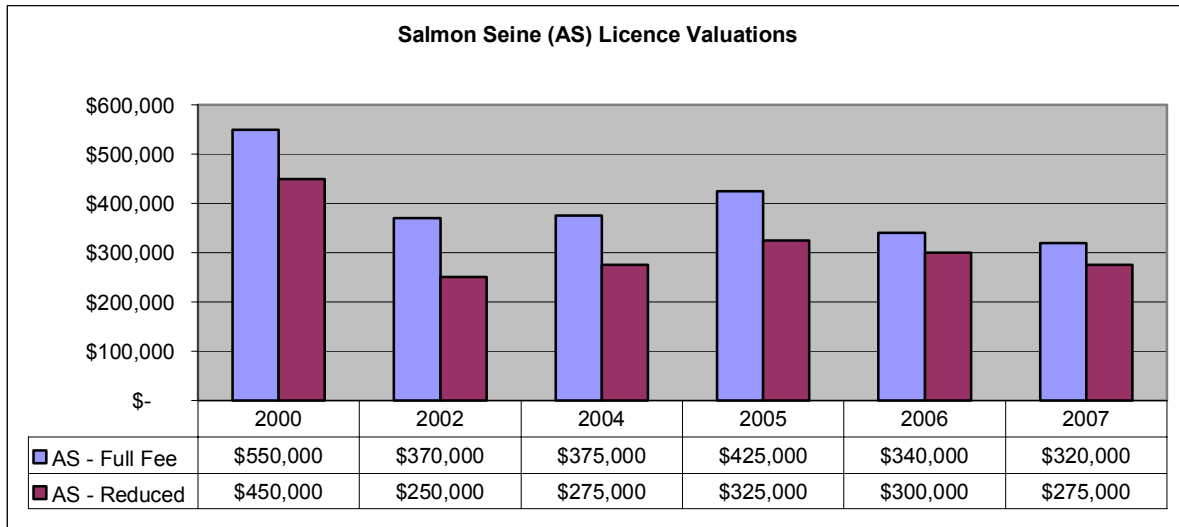
- The Allocation Transfer Program was a significant player, purchasing 3 licences during the year. The average rate paid by the Program was consistent with that indicated in “industry” transactions.
- Longer licences still command a premium (at least, holders of longer licences post higher asking-prices). There are too few transactions to quantify this “premium.”
- Average vessel length: approx. 64 feet.
- No discernable difference in values by area, although Area A (north) has provided the better fishing/earnings opportunities in recent years.

Vessel Value

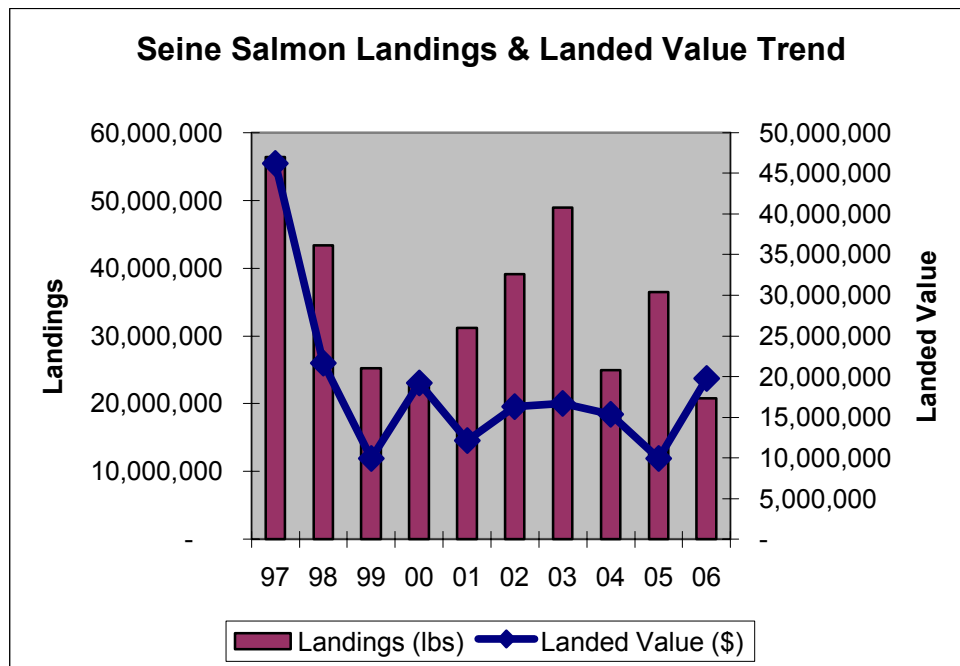
Vessel counts exclude F licences and are best-estimates.

Vessel Type		Classic Style			Modern Style		Total / Average
		Wood	Aluminum / Fibreglass	Steel	Aluminum / Fibreglass	Steel	
Inside Waters / Smaller Vessel	Est # Vessels	13	7	4	13	1	38
	Unit Value	25,000	125,000	150,000	300,000	325,000	158,553
	Aggregate Val.	325,000	875,000	600,000	3,900,000	325,000	6,025,000
Outside Waters / Larger Vessel	Est # Vessels	30	23	11	38	47	149
	Unit Value	65,000	175,000	200,000	400,000	500,000	314,597
	Aggregate Val.	1,950,000	4,025,000	2,200,000	15,200,000	23,500,000	46,875,000
Total / Average	Est # Vessels	43	30	15	51	48	187
	Average Value	52,907	163,333	186,667	374,510	496,354	282,888
	Aggregate Val.	2,275,000	4,900,000	2,800,000	19,100,000	23,825,000	52,900,000

Valuation Trends



Landings & Landed Value Trends



<i>Avg Landings per Licence (lbs, 2006)</i>	84,626
<i>Avg Landed Value/Licence (2005):</i>	\$ 80,257

- Changes in DFO's commercial salmon management policy post-1997 have resulted in a low levels of landings in the recent past (coho conservation, precautionary management, SARA, wild salmon policy). A reduction in landings has coincided with

a decline in fish prices related to competitive conditions (eg. growth of farmed salmon). Higher than recent sockeye landings in 2006 caused the up-tick in landed value in 2006.

Outlook

- The performance of the commercial salmon fishery does not support the asset values indicated in this valuation, according to many industry participants.
- Asset values are supported largely by government licence retirements (current ATP and looming PICFI) and speculation about an looming quota management plan.
- DFO has advised the industry that a catch-share approach is necessary to facilitate transfers of fishing capacity to First Nations and meet conservation and socio-economic goals. Salmon industry advisors (CSAB) are involved in an ongoing process to try to negotiate reform for the commercial salmon fishery.
- The outlook for commercial salmon fisheries remains “cloudy:”
 - Uncertain access to the resource (allocation issues, SARA, Wild Salmon Policy).
 - Market challenges and opportunities.
 - Rising costs (eg. fuel).
 - Volatile ocean conditions and salmon returns.
 - Prospects for industry rationalization that may bring both improved business performance and further reduce participation in the fishery.

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>	1042
<i>No. of Commercial Communal Lic's (not valued in this study)</i>	110 (FAG designation, Party-based)
<i>Licensing/Management Framework</i>	Area Licensing; vessel owner must designate one of 3 areas: North (C), Johnstone St/Barclay Snd (D), or Fraser River (E); periodic area reselection (2006 was last re-selection). Stacking allowed; currently 658 Area C, 355 Area D, and 393 Area E (includes FAG and NAG licences)
<i>Valuation Criteria (Stratification)</i>	Full fee and reduced fee licences are valued separately Vessels are stratified by size, construction material, and capability
<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. 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).

Valuations Performed

Valuations	Purchase and Sale			Lease		
	Valuation Conducted?	Sample Size	Confidence Level	Valuation Conducted?	Sample Size	Confidence Level
Licence	Yes	>10	Med-High	n.a.		
Quota	n.a.			n.a.		
Vessel	Yes	<3	Low	n.a.		

Current Valuation

Licence Value at March 31, 2007

Licence Category	Avg. Licence Value (\$)	Total Licences	Total Value, All Licences (\$millions)
AG - Full Fee	75,000	878	65,850,000
AG - Reduced Fee	60,000	164	9,840,000
AG Licences	72,639	1,042	75,690,000

Valuation Considerations

- Areas C and D seem to trade at similar values (\$70,000-85,000) with Area E lagging somewhat below (\$60,000-75,000).
- There was only one confirmed sale of a reduced fee licence (a distress situation), so this valuation is an inference.

Valuation Comments

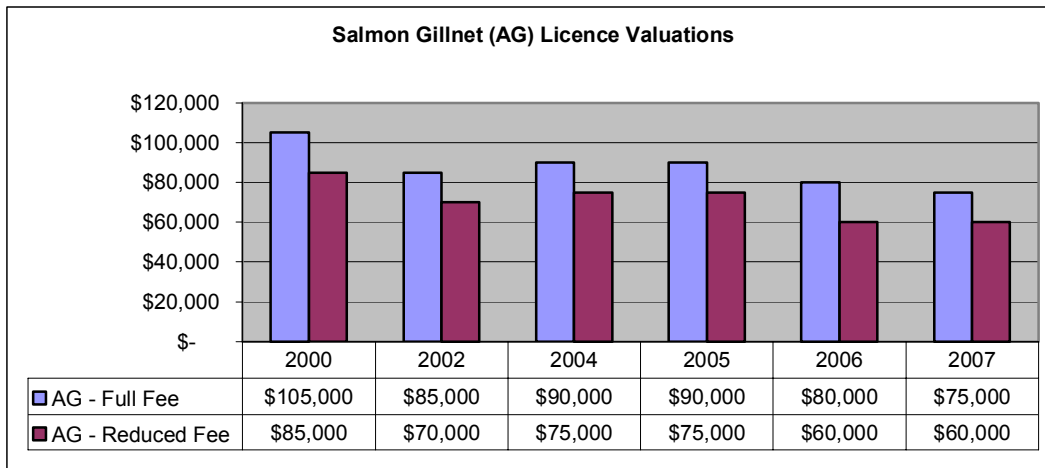
- Values have dropped marginally this year. Last years values were \$80,000 and \$68,000.
- The Allocation Transfer Program was a significant player, purchasing 17 licences during the year. The average rate paid by the Program was consistent with that indicated in “industry” transactions.
- Average vessel length approx. 33 feet; there is some premium for longer licences.

Vessel Value

Vessel counts exclude F licences and are best-estimates.

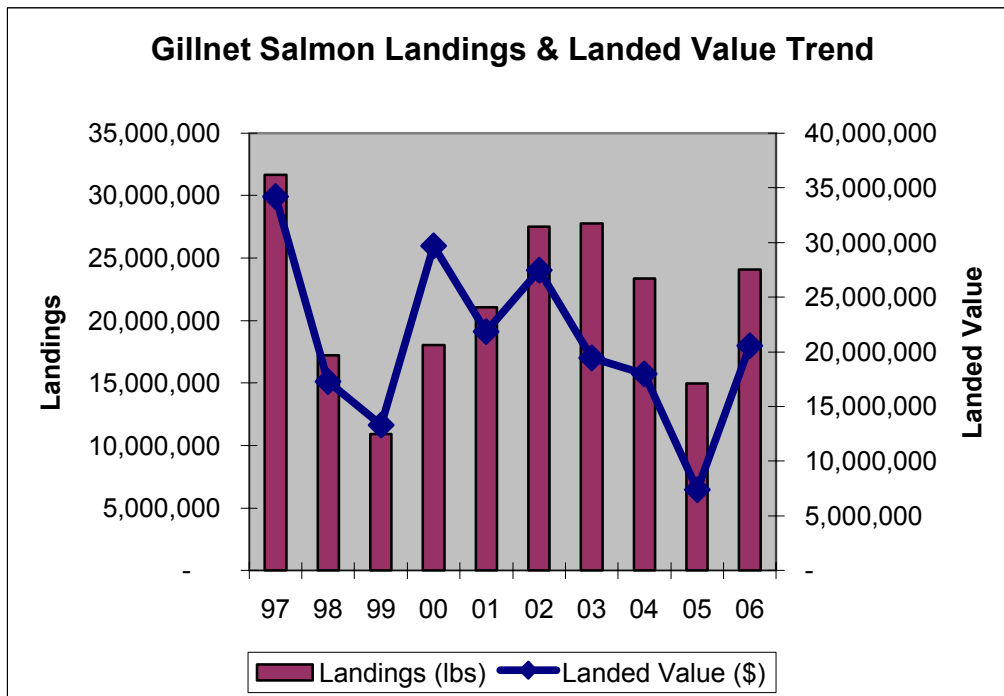
Vessel Type		Classic Style			Modern Style		Total / Average
		Wood	Aluminum / Fibreglass	Steel	Aluminum / Fibreglass	Steel	
Inside Waters / Smaller Vessel	Est # Vessels	60	250	-	87	-	397
	Unit Value	15,000	25,000	-	75,000	-	34,446
	Aggregate Val.	900,000	6,250,000	-	6,525,000	-	13,675,000
Outside Waters / Larger Vessel	Est # Vessels	90	220	1	175	2	488
	Unit Value	35,000	50,000	75,000	150,000	175,000	98,137
	Aggregate Val.	3,150,000	11,000,000	75,000	26,250,000	350,000	40,825,000
Total / Average	Est # Vessels	150	470	1	262	2	885
	Average Value	27,000	36,702	75,000	125,095	175,000	61,582
	Aggregate Val.	4,050,000	17,250,000	75,000	32,775,000	350,000	54,500,000

Valuation Trends



- Values during the period shown have been “propped-up” by government licence purchases (or anticipated purchases), and speculation about an expected quota management plan.

Landings & Landed Value Trends



Avg Landings per Licence (lbs, 2006)	17,134
Avg Landed Value/Licence (2006):	\$ 14,637

- Changes in DFO’s commercial salmon management policy post-1997 have resulted in a low levels of landings in the recent past (coho conservation, precautionary management, SARA, wild salmon policy). A reduction in landings has coincided with a decline in fish prices related to competitive conditions (eg. growth of farmed salmon). Higher than recent sockeye landings in 2006 caused the up-tick in landed value in 2006.

Outlook

- The performance of the commercial salmon fishery does not support the asset values indicated in this valuation, according to many industry participants.
- Asset values are supported largely by government licence retirements (current ATP and looming PICFI) and speculation about an looming quota management plan.
- DFO has advised the industry that a catch-share approach is necessary to facilitate transfers of fishing capacity to First Nations and meet conservation and socio-economic goals. Salmon industry advisors (CSAB) are involved in an ongoing process to try to negotiate reform for the commercial salmon fishery.
- The outlook for commercial salmon fisheries remains “cloudy:”
 - Uncertain access to the resource (allocation issues, SARA, Wild Salmon Policy).
 - Market challenges and opportunities.
 - Rising costs (eg. fuel).
 - Volatile ocean conditions and salmon returns.
 - Prospects for industry rationalization that may bring both improved business performance and further reduce participation in the fishery.

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>	516
<i>No. of Commercial Communal Lic's (not valued in this study)</i>	22 (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 (fall of 2007 is next re-selection). Stacking allowed; currently 248 Area F, 168 Area G, 122 Area H (includes FAT licences).
<i>Valuation Criteria (Stratification)</i>	Full fee and reduced fee licences are valued separately. Some valuation differences by area are noted. Vessels are stratified by size, construction material, and capability
<i>Additional Information</i>	Competitive fishery. 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).

Valuations Performed

Valuations	Purchase and Sale			Lease		
	<i>Valuation Conducted?</i>	<i>Sample Size</i>	<i>Confidence Level</i>	<i>Valuation Conducted?</i>	<i>Sample Size</i>	<i>Confidence Level</i>
Licence	Yes	5-10	Med-High	n.a.		
Quota	n.a.			n.a.		
Vessel	Yes	<3	Low	n.a.		

Current Valuation

Licence Value at March 31, 2007

Licence Category	Avg. Licence Value (\$)	Total Licences	Total Value, All Licences (\$millions)
AT - Full Fee	135,000	493	66,555,000
AT - Reduced Fee	115,000	23	2,645,000
AT Licences	134,109	516	69,200,000

Valuation Considerations

- Transactions range from \$125,000 - \$150,000. Longer licences command a modest premium (longer licences are at the high end of the valuation range).
- Little difference in value between areas with recent and upcoming area re-selections.
- Reduced fee licence value an estimate - no recent transactions identified.

Valuation Comments

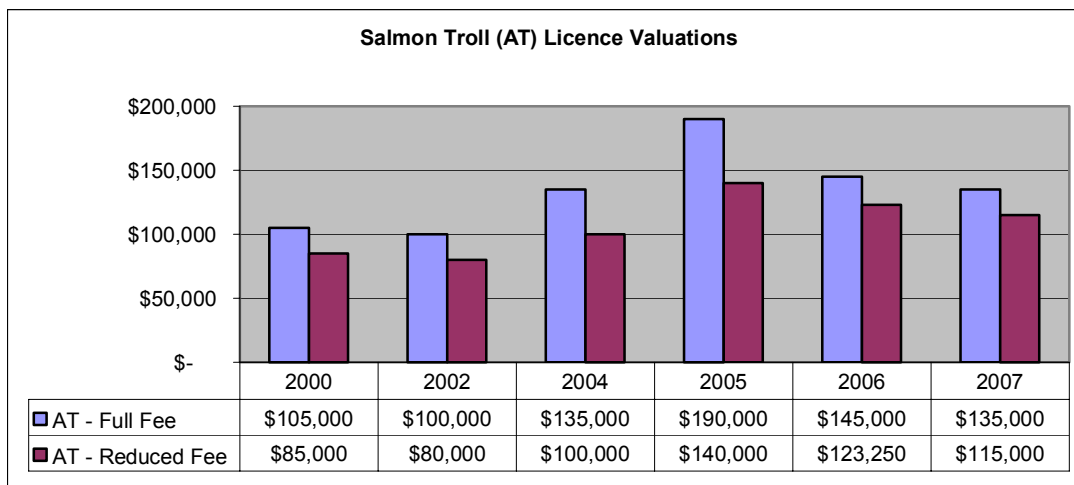
- Licence values were quite consistent with prior year valuations (last year \$140,000/\$123,250).
- Average vessel length approx. 40 feet.
- Area F is undergoing a pilot IQ program. Chinook quota is leasable, with transactions occurring at between \$15 and \$23 per fish.

Vessel Value

Vessel counts exclude F licences and are best-estimates.

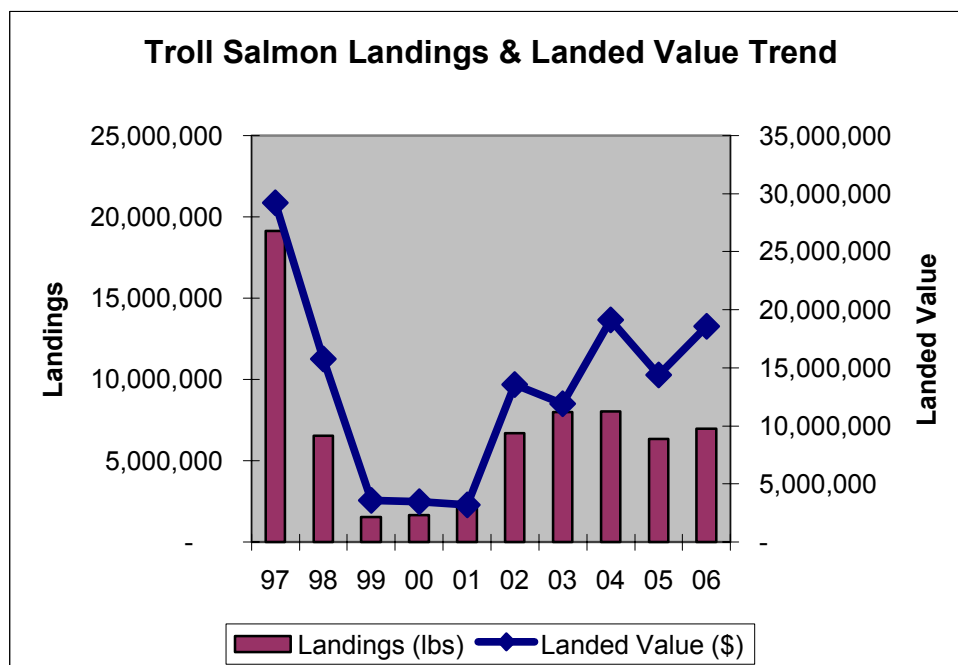
Vessel Type		Classic Style			Modern Style		Total / Average
		Wood	Aluminum / Fibreglass	Steel	Aluminum / Fibreglass	Steel	
Inside Waters / Smaller Vessel	Est # Vessels	14	5	1	7	-	27
	Unit Value	15,000	25,000	40,000	75,000	-	33,333
	Aggregate Val.	210,000	125,000	40,000	525,000	-	900,000
Outside Waters / Larger Vessel	Est # Vessels	228	141	16	27	4	416
	Unit Value	35,000	50,000	75,000	150,000	175,000	50,433
	Aggregate Val.	7,980,000	7,050,000	1,200,000	4,050,000	700,000	20,980,000
Total / Average	Est # Vessels	242	146	17	34	4	443
	Average Value	33,843	49,144	72,941	134,559	175,000	49,391
	Aggregate Val.	8,190,000	7,175,000	1,240,000	4,575,000	700,000	21,880,000

Valuation Trends



- The “spike” in 2005 valuation was a result of quota speculation arising from the “Pearse-McRae” report and optimism from promising pilot IQ tests in the fishery. Values have moderated in the last two years based on actual fishery results.

Landings & Landed Value Trends



<i>Avg Landings per Licence (lbs, 2006)</i>	12,986
<i>Avg Landed Value/Licence (2006):</i>	\$34,507

- The Area F pilot IQ fishery and Area G winter/spring chinook fishery are providing opportunities for “niche” marketing, resulting in improved prices and landed values for fishermen.

Outlook

- The troll fishery has out-performed the net fisheries in recent years, due to somewhat improved access to chinook salmon and attractive prices for the product.
- There is some concern within the fleet that in the area reselection to take place in the fall, a disproportionate number of vessels will opt for Area F, impairing results in that area.
- DFO has advised the industry that a catch-share approach is necessary to facilitate transfers of fishing capacity to First Nations and meet conservation and socio-economic goals. Salmon industry advisors (CSAB) are involved in an ongoing process to try to negotiate reform for the commercial salmon fishery.
- The outlook for commercial salmon fisheries remains “cloudy:”
 - Uncertain access to the resource (allocation issues, SARA, Wild Salmon Policy).
 - Market challenges and opportunities.
 - Rising costs (eg. fuel).
 - Volatile ocean conditions and salmon returns.
 - Prospects for industry rationalization that may bring both improved business performance and further reduce participation in the fishery.

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>	248
<i>No. of Commercial Communal Lic's (not valued in this study)</i>	4 (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>Valuation Criteria (Stratification)</i>	Full fee and reduced fee licences are valued separately Vessels are stratified by size, construction material, and capability.
<i>Additional Information</i>	Active lease market for licences. There are five stock management areas: QCI, North, Central, WCVI, and Strait of Georgia.

Valuations Performed

Valuations	Purchase and Sale			Lease		
	<i>Valuation Conducted?</i>	<i>Sample Size</i>	<i>Confidence Level</i>	<i>Valuation Conducted?</i>	<i>Sample Size</i>	<i>Confidence Level</i>
Licence	Yes	<3	Low	Yes	>20	Med
Quota	n.a.			n.a.		
Vessel	Yes	<3	Low	n.a.		

Current Valuation

Licence Value at March 31, 2007

Licence Category	Avg. Licence Value (\$)	Total Licences	Total Value, All Licences (\$)	Annual Lease Rate (\$)
HS - Full Fee	150,000	196	29,400,000	5,000
HS - Reduced Fee	130,000	52	6,760,000	5,000
HS Licences	145,806	248	36,160,000	5,000

Valuation Considerations

- Very few transactions - valuation based largely on discussion of value ranges. Eg, there may be licences available at \$180,000, but no purchasers. There may be purchasers at \$130,000 but no vendors.
- Lease rates ranged from nil (only licence fees paid) to \$7,000; some leases may be paid/adjusted based on actual results. Lease rates extraordinarily low in 2007.

Valuation Comments

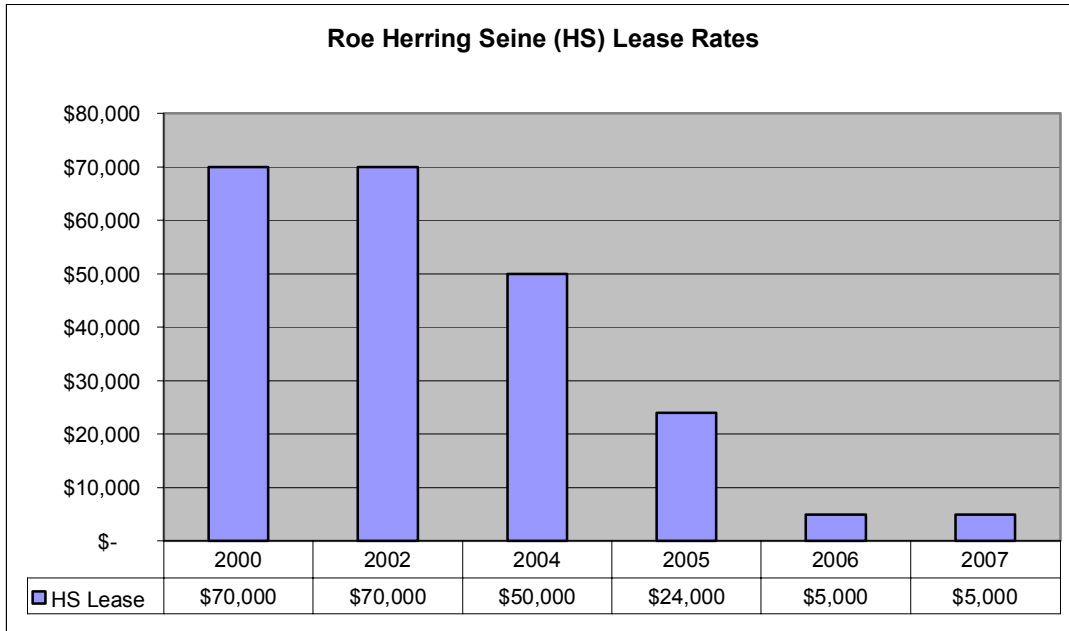
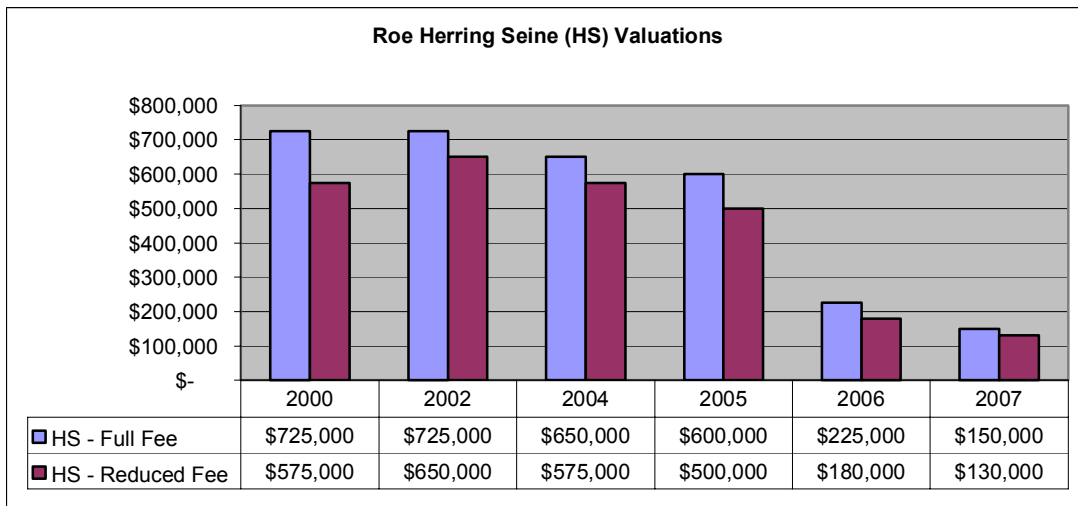
- This year's valuation captures the "bottoming out" of the licence market. It is believed that values have firmed *slightly* from this level through the spring and summer of 2007.
- There are few transactions - tremendous uncertainty regarding values and future prospects prevails.
- Both market and resource challenges are besetting the fishery.

Vessel Value

Vessel counts exclude F licences and are best-estimates.

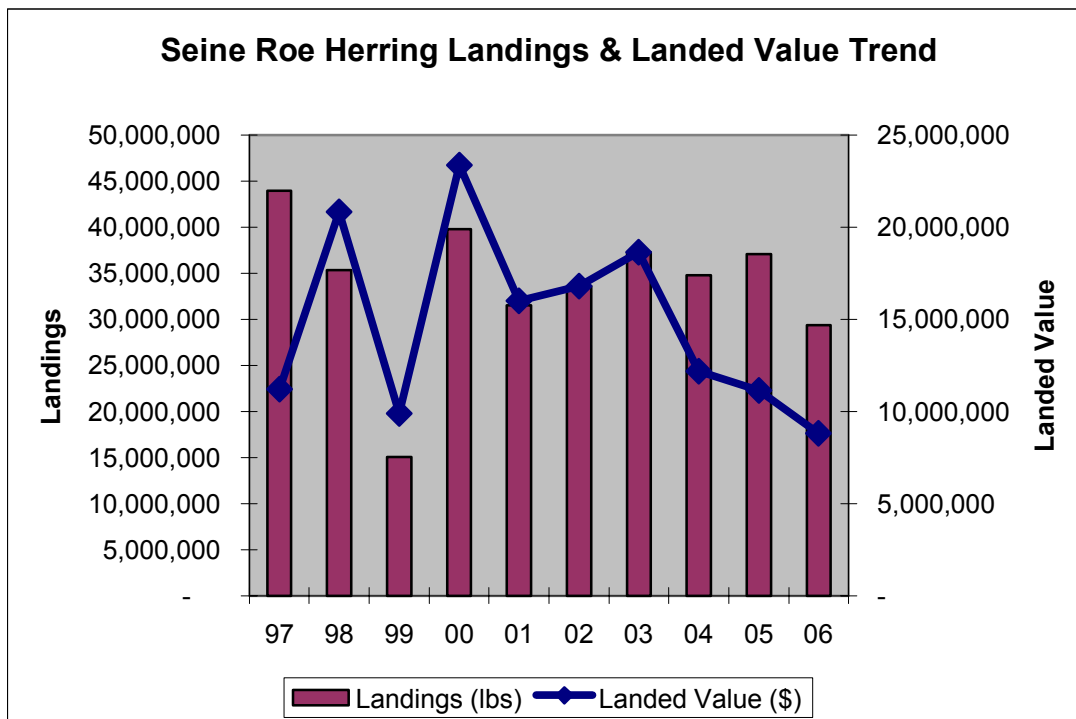
Vessel Type		Classic Style			Modern Style		Total / Average
		Wood	Aluminum / Fibreglass	Steel	Aluminum / Fibreglass	Steel	
Inside Waters / Smaller Vessel	Est # Vessels	-	-	-	2	-	2
	Unit Value	-	-	-	300,000	-	300,000
	Aggregate Val.	-	-	-	600,000	-	600,000
Outside Waters / Larger Vessel	Est # Vessels	18	13	12	36	53	132
	Unit Value	65,000	175,000	200,000	400,000	500,000	354,129
	Aggregate Val.	1,170,000	2,275,000	2,400,000	14,400,000	26,500,000	46,745,000
Total / Average	Est # Vessels	18	13	12	38	53	134
	Average Value	65,000	175,000	200,000	394,737	500,000	353,321
	Aggregate Val.	1,170,000	2,275,000	2,400,000	15,000,000	26,500,000	47,345,000

Valuation Trends



- The dramatic erosion in both transaction and lease values seen since 2002 is a result of weakening market conditions in Japan for BC roe.

Landings & Landed Value Trends



- NOTE - the contractor lacks confidence in the 1999 data point (landings and values appear too low)

<i>Avg Landings per Licence (lbs, 2006)</i>	116,669
<i>Avg Landed Value/Licence (2006):</i>	\$35,000

Outlook

- Both licence values and lease rates have dropped dramatically in recent years. A strengthening Canadian dollar (relative to the yen) and weakening Japanese demand are largely responsible.
- Price levels for product from the 2007 fishery improved somewhat over 2006 levels. This allowed for improved - but still very modest - results for participants.
- The roe herring quota is expected to drop again in 2008. While this may bode well for prices, BC producers are concerned about maintaining their market presence in Japan vs. competing jurisdictions (Alaska, San Francisco, Russia).
- The outlook for BC's roe herring industry is highly uncertain, as reflected in low licence values.

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>	1239
<i>No. of Commercial Communal Lic's (not valued in this study)</i>	29 (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>Valuation Criteria (Stratification)</i>	Full fee and reduced fee licences are valued separately. Skiffs/punts are stratified by size and capability; because DFO does not formally track skiffs used in this fishery, valuation is a rough estimate of fleet size and composition.
<i>Additional Information</i>	Active lease market for licences. Licences are operated on punts and skiffs. There are five stock management areas: QCI, North, Central, WCVI, and Strait of Georgia.

Valuations Performed

Valuations	Purchase and Sale			Lease		
	<i>Valuation Conducted?</i>	<i>Sample Size</i>	<i>Confidence Level</i>	<i>Valuation Conducted?</i>	<i>Sample Size</i>	<i>Confidence Level</i>
Licence	Yes	5-10	Medium	Yes	>100	High
Quota	n.a.			n.a.		
Vessel	Yes	<3	Low	n.a.		

Current Valuation

Licence Value at March 31, 2007

Licence Category	Avg. Licence Value (\$)	Total Licences	Total Value, All Licences (\$)	Annual Lease Rate (\$)
HG - Full Fee	35,000	916	32,025,000	2,000
HG - Reduced Fee	25,000	323	8,100,000	2,000
HG Licences	36,731	1,239	40,125,000	2,000

Valuation Considerations

- Relatively few transactions for the period. Prices range from \$30,000 to \$45,000 for full-fee licences. Little reliable data to support the reduced fee valuation.
- Transactions @ \$50,000 occurred in the summer of 2007 (after the March 31 valuation date).

Valuation Comments

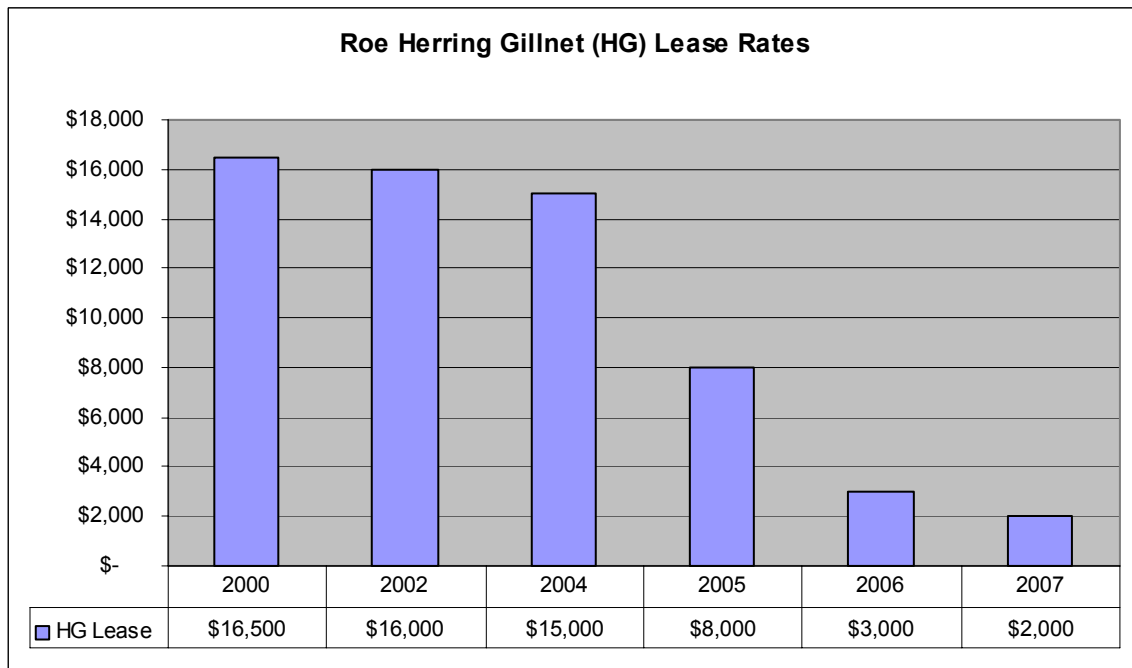
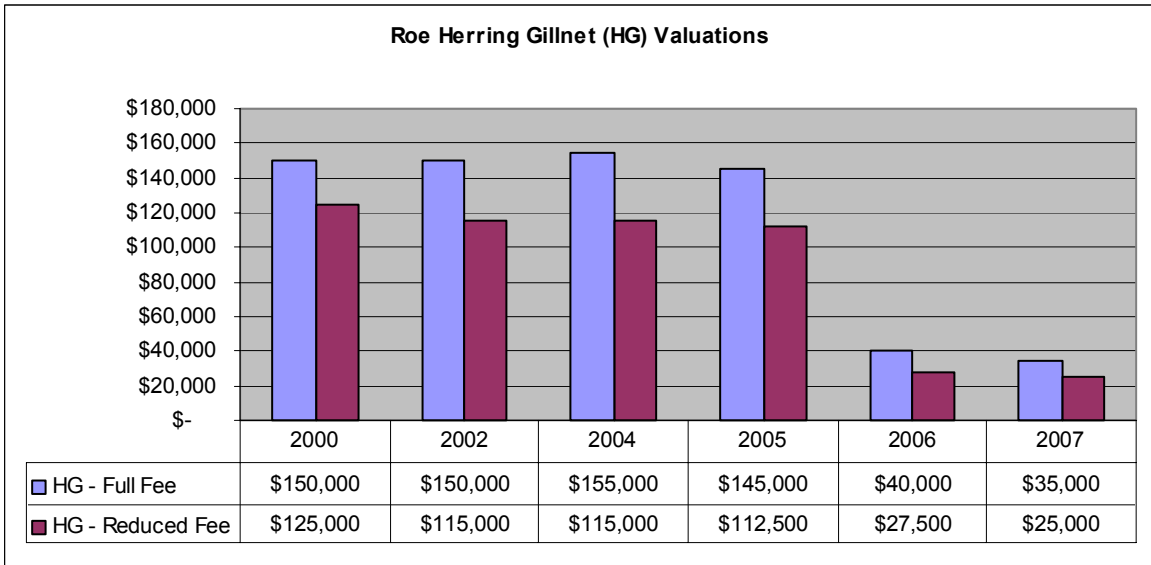
- This year's valuation captures the "bottoming out" of the licence market. It is believed that values have firmed somewhat from this level through the spring and summer of 2007.
- There are relatively few transactions in this generally active licence category, reflecting tremendous uncertainty regarding values and future prospects.
- Both market and resource challenges are besetting the fishery.

Vessel Value

Vessel counts exclude F licences and are best-estimates.

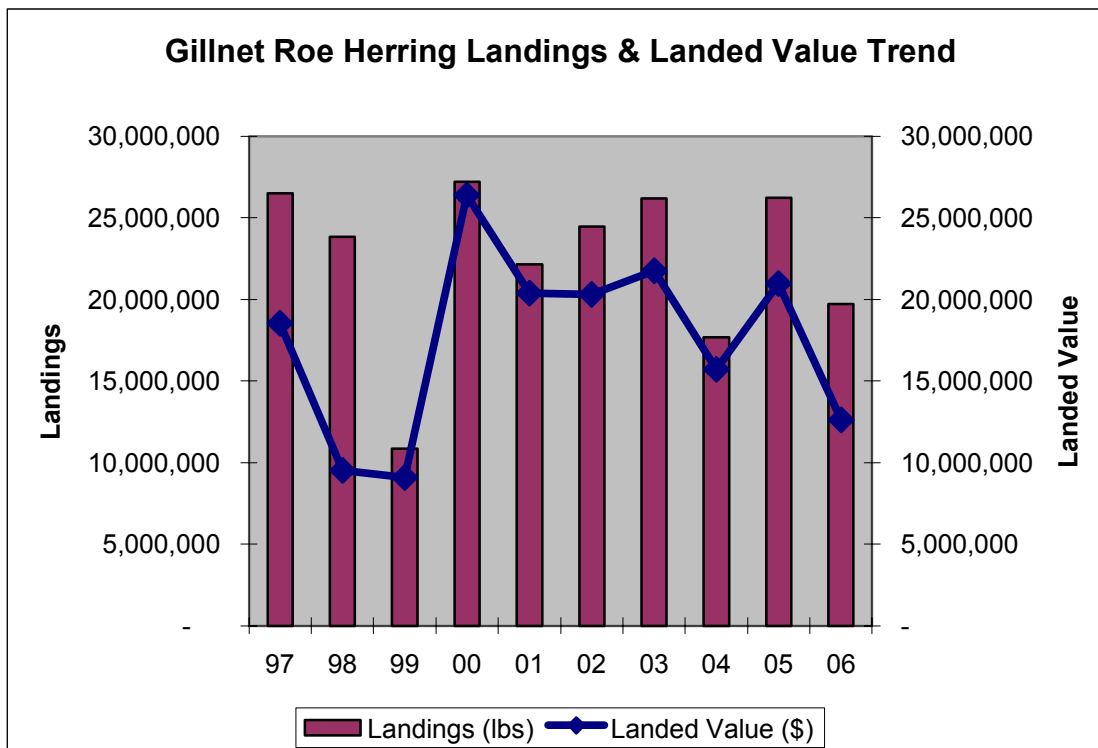
Vessel Type		Classic Style			Modern Style		Total / Average
		Wood	Aluminum / Fibreglass	Steel	Aluminum / Fibreglass	Steel	
Inside Waters / Smaller Vessel	Est # Vessels	-	100	-	-	-	100
	Unit Value	-	10,000	-	-	-	10,000
	Aggregate Val.	-	1,000,000	-	-	-	1,000,000
Outside Waters / Larger Vessel	Est # Vessels	-	130	-	170	-	300
	Unit Value	-	25,000	-	65,000	-	47,667
	Aggregate Val.	-	3,250,000	-	11,050,000	-	14,300,000
Total / Average	Est # Vessels	-	230	-	170	-	400
	Average Value	-	18,478	-	65,000	-	38,250
	Aggregate Val.	-	4,250,000	-	11,050,000	-	15,300,000

Valuation Trends



- The dramatic erosion in both transaction and lease values seen since 2002 is a result of weakening market conditions in Japan for BC roe.

Landings & Landed Value Trends



<i>Avg Landings per Licence (lbs, 2006)</i>	15,540
<i>Avg Landed Value/Licence (2006):</i>	\$ 9,945

Outlook

- Both licence values and lease rates have dropped dramatically in recent years. A strengthening Canadian dollar (relative to the yen) and weakening Japanese demand are largely responsible.
- Price levels for product from the 2007 fishery improved somewhat over 2006 levels. This allowed for improved - but still very modest - results for participants.
- The roe herring quota is expected to drop again in 2008. While this may bode well for prices, BC producers are concerned about maintaining their market presence in Japan vs. competing jurisdictions (Alaska, San Francisco, Russia).
- The outlook for BC's roe herring industry is highly uncertain, as reflected in low licence values.

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 Commercial Communal 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 licence entitled to harvest 16,000 lbs (8 short tons) of product. Licences are not technically transferable.
<i>Valuation Criteria (Stratification)</i>	Each licence is assumed to hold the same value. No vessel valuation provided for this fishery. Vessel mix varies by-operation and year-to-year.
<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.

Valuations Performed

Valuations	Purchase and Sale			Lease		
	<i>Valuation Conducted?</i>	<i>Sample Size</i>	<i>Confidence Level</i>	<i>Valuation Conducted?</i>	<i>Sample Size</i>	<i>Confidence Level</i>
Licence	Yes	nil	Very Low	n.a.		
Quota	n.a.			n.a.		
Vessel	n.a.			n.a.		

Current Valuation

Licence Value at March 31, 2007

<i>Licence Category</i>	<i>Value per Licence</i>	<i># Licences</i>	<i>Total Value, All Licences (\$)</i>
Spawn on Kelp (J) Licence	\$ 375,000	36	13,500,000

Valuation Considerations

- Valuation is based solely on discussion of values with industry participants. There were no known transactions during the period.

- Estimates of value range from \$200,000 to \$500,000
- There is scant information upon which to base a valuation in this fishery.

Valuation Comments

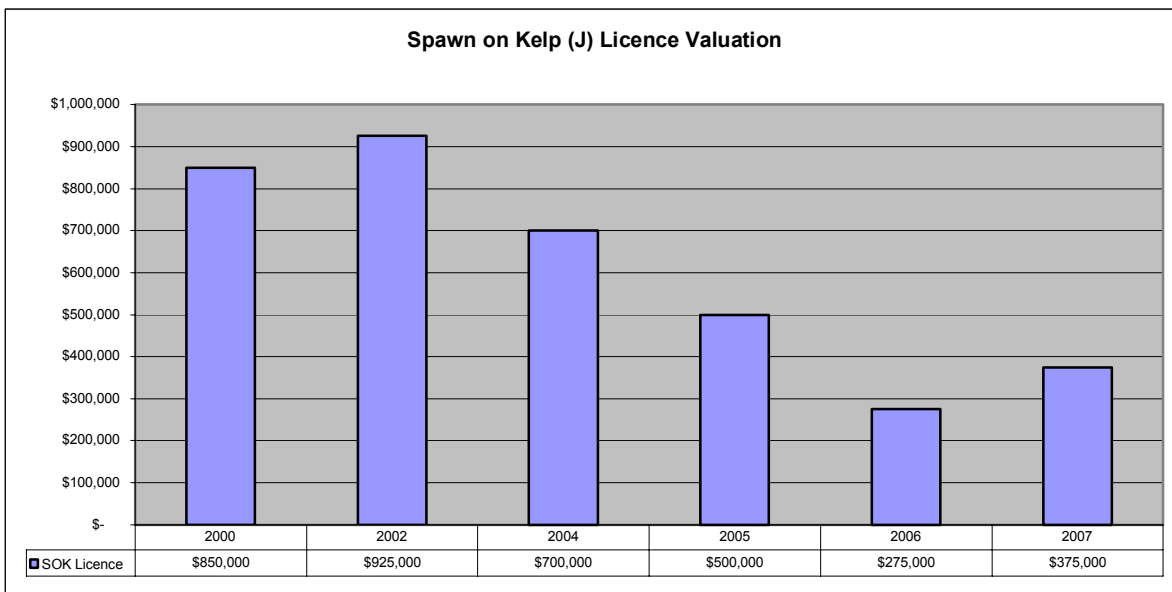
- Prices received by licence operators this year improved dramatically, from the depressed levels in the \$6-7 per-pound range seen in the prior two years, to \$15+ .
- Higher prices should contribute to improved viability in the current year.

Vessel Value

- No valuation provided, since no specific vessels are associated with a licence

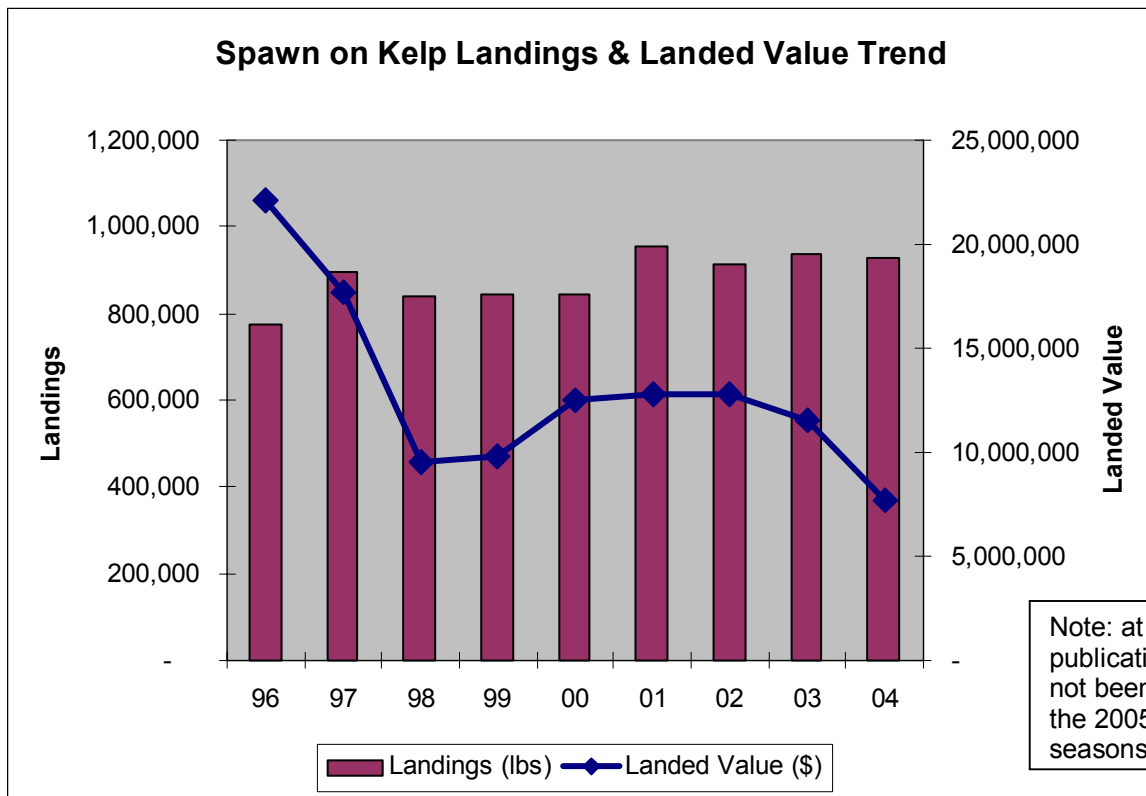
Valuation Trends

- Note that each valuation shown below is a “best guess”... not based on tangible transactions.



- Rapidly eroding licence valuation estimates are a result of a softening Japanese market for BC spawn on kelp. An improvement in BC SOK prices was realized in 2007.

Landings & Landed Value Trends



<i>Avg Landings per Licence (lbs, 2004)</i>	20,373
<i>Avg Landed Value/Licence (2004):</i>	\$ 166,435

- There is no landings or landed value data since 2004. It is believed that the 2005 and 2006 saw a decline in both landings and landed value vs. the 2004 season. In 2006, many of the J licence operations did not operate to full capacity (if they operated at all).

Outlook

- The problems in the SOK fishery mirror those seen in the roe herring fisheries:
 - Soft markets (Japan).
 - Short term downturn in herring stocks.
 - Inability to mount profitable operations given prices, costs, and resource abundance.
- A dramatic rebound in prices enjoyed in 2007 was a boon for the industry. Whether or not this rebound represents a promising trend or merely a “blip” is unknown.
- The immediate and long-term market outlook remains uncertain.

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>	402
<i>No. of Commercial Communal Lic's (not valued in this study)</i>	34 (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>Valuation Criteria (Stratification)</i>	<p>Licences are valued on a per-foot basis; quota is valued on a per-pound basis.</p> <p>Vessels are stratified by size, construction material, and capability</p>
<i>Additional Information</i>	<p>About half, or 200, of the L-licensed fleet actively fish for halibut.</p> <p>Quotas and harvests have been relatively stable in recent years (10-12 million pound range).</p> <p>Quota in current management plan is 10.1 million pounds.</p> <p>Vessel-based licence allows harvest of Schedule II species and transporting (packing).</p>

Valuations Performed

Valuations	Purchase and Sale			Lease		
	<i>Valuation Conducted?</i>	<i>Sample Size</i>	<i>Confidence Level</i>	<i>Valuation Conducted?</i>	<i>Sample Size</i>	<i>Confidence Level</i>
Licence	Yes	<3	Low	n.a.		
Quota	Yes	5-10	High	Yes	>10	High
Vessel	Yes	<3	Low	n.a.		

Current Valuation

Licence & Quota Value at March 31, 2007

Licence Category	Value per Foot / lb of Quota (\$)	Est # Feet / Lbs of Quota	Total Value, All Licences (\$)	Annual Lease Rate (\$)
Halibut (L) Licence	1,400	17,125	23,975,280	n.a.
Halibut Quota	33.00	10,089,400	332,950,200	3.00
Halibut Lic / Quota Value			356,925,480	

Valuation Considerations

- Licence values range from \$1,300 to \$1,700 per foot. “Married” licences (those attached to other categories of licence) trade at the lower end of the range, with “stand alone” licences at the higher end.
- Quota prices ranged from \$27/lb to \$35/lb, with higher levels seen at the valuation date (March 31, 2007). The ATP was an active buyer this year, purchasing several parcels of quota at rates consistent with market levels.
- Quota lease rates ranged from \$2.90 per pound to \$3.50 per pound. The rates have risen from the beginning of the season (March 2006) through the summer of 2007.

Valuation Comments

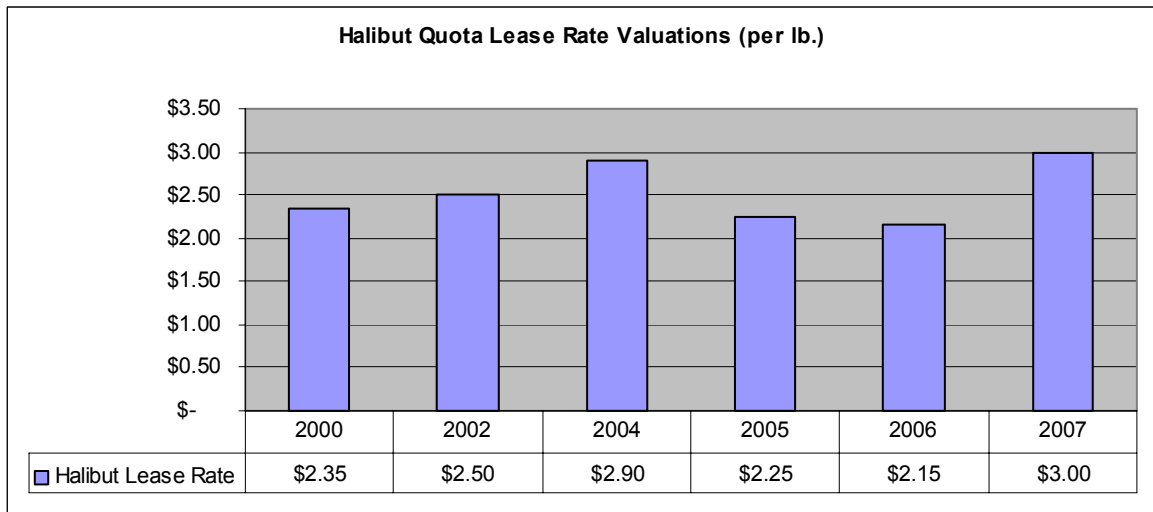
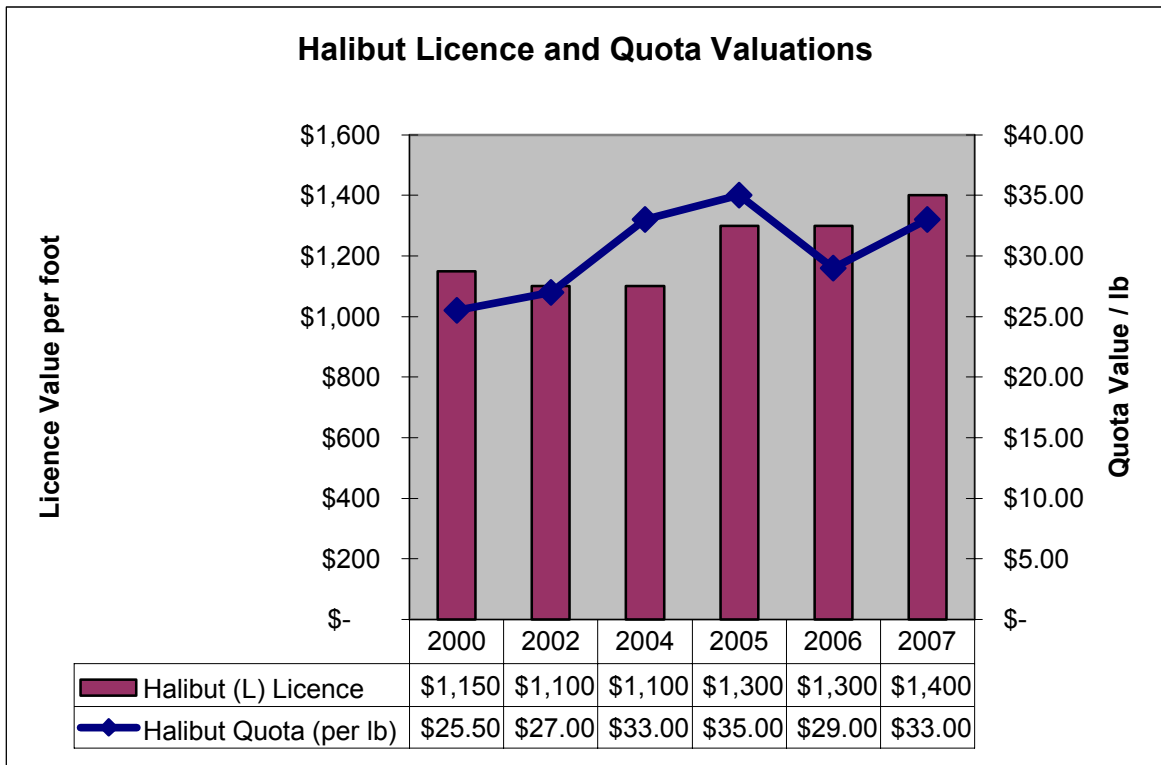
- Average vessel length is assumed to be 42.6 feet; average licence value \$59,640.
- The fishery is seen as quite stable, and fish prices have been relatively strong during the valuation period.

Vessel Value

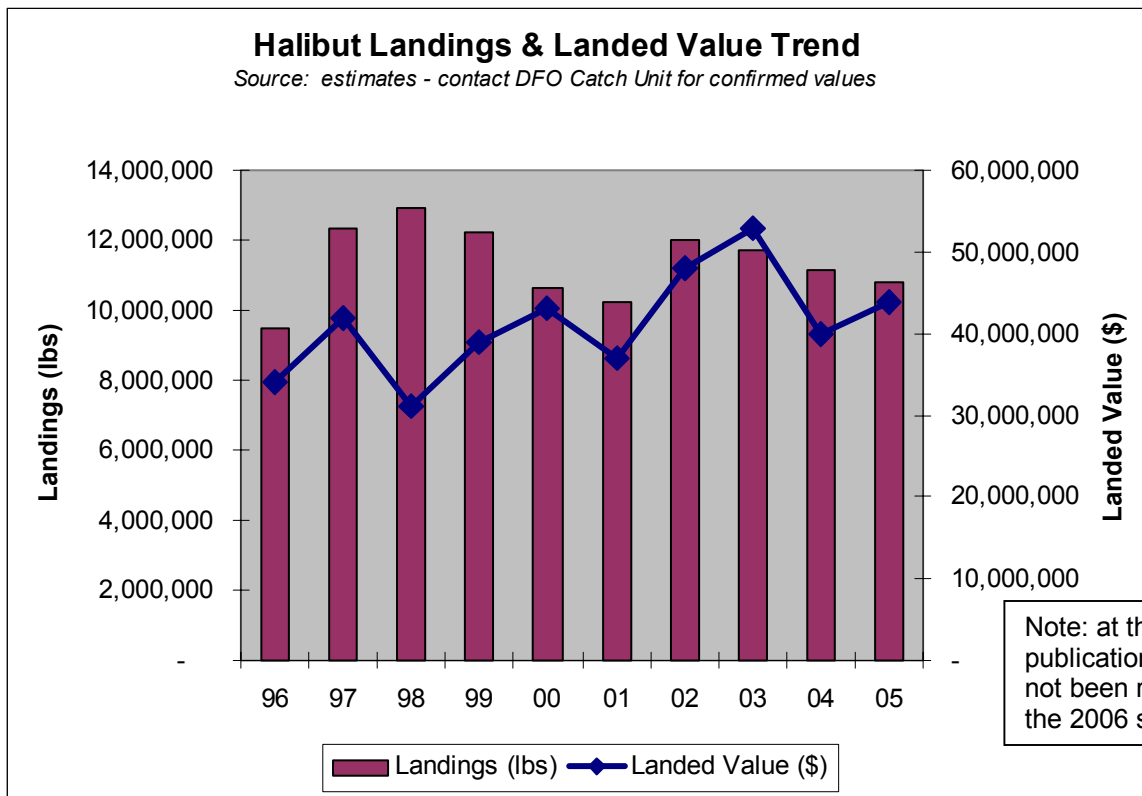
Vessel counts exclude F licences and are best-estimates.

Vessel Type		Classic Style			Modern Style		Total / Average
		Wood	Aluminum / Fibreglass	Steel	Aluminum / Fibreglass	Steel	
Inside Waters / Smaller Vessel	Est # Vessels	25	46	-	22	1	94
	Unit Value	15,000	50,000	-	100,000	125,000	53,191
	Aggregate Val.	375,000	2,300,000	-	2,200,000	125,000	5,000,000
Outside Waters / Larger Vessel	Est # Vessels	98	118	20	49	23	308
	Unit Value	35,000	80,000	100,000	300,000	400,000	125,877
	Aggregate Val.	3,430,000	9,400,000	2,000,000	14,700,000	9,200,000	39,770,000
Total / Average	Est # Vessels	123	164	20	71	24	402
	Average Value	30,935	71,585	100,000	238,028	388,542	108,881
	Aggregate Val.	3,805,000	11,740,000	2,000,000	16,900,000	9,325,000	43,770,000

Valuation Trends



Landings & Landed Value Trends



<i>Avg Landings per Licence (lbs, 2005)</i>	24,741
<i>Avg Landed Value/Licence (2005):</i>	\$ 100,298

Outlook

- Halibut remains a fundamentally strong fishery, with a stable, well-managed resource. Unlike other fish exports that are suffering because of a strong Canadian dollar relative to the US dollar (most of BC halibut is sold to the USA), halibut prices have remained firm. Prices to fishermen are quite high currently - in the \$5.00 per pound range.
- The current “hot-button” issue in the commercial halibut industry is the Commercial-Recreational Halibut Allocation Policy. In 2006 the recreational sector exceeded its 12% catch ceiling (and industry anticipates it will do so again in 2007). Commercial halibut participants express strong concerns that, if not addressed, this “encroachment” by the halibut sector poses both a threat to resource conservation and the security of commercial access.
- The BC halibut fishery is working its way through the Marine Stewardship Council (MSC) certification process. Industry hopes that certification will occur prior to the 2008 season. The MSC seal - granted only after a fishery passes a rigorous evaluation - provides consumers with assurance that a fishery’s products are “certified”

sustainable.” MSC certification is one step to ensuring BC halibut’s long term marketability.

- The halibut sector is gaining familiarity with the integrated groundfish fishery initiative, and access to rockfish bycatch is generally being facilitated under the new system so that access to rockfish is not compromising the halibut fishery.

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>	46
<i>No. of Commercial Communal Lic's (not valued in this study)</i>	2 (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>Valuation Criteria (Stratification)</i>	Licences are valued on a per-licence basis; quota is valued on a per-pound basis. Vessels are stratified by size, construction material, and capability.
<i>Additional Information</i>	About 20 vessels actively fishing currently. Vessel-based licence allows harvest of Schedule II species and transporting (packing).

Valuations Performed

Valuations	Purchase and Sale			Lease		
	<i>Valuation Conducted?</i>	<i>Sample Size</i>	<i>Confidence Level</i>	<i>Valuation Conducted?</i>	<i>Sample Size</i>	<i>Confidence Level</i>
Licence	Yes	<3	Low	n.a.		
Quota	Yes	3-5	Med	Yes	>5	Med
Vessel	Yes	<3	Low	n.a.		

Current Valuation

Licence & Quota Value at March 31, 2007

Licence Category	Value per Licence / lb of Quota (\$)	# Licences / Lbs of Quota	Total Value, All Licences (\$)	Annual Lease Rate (\$)
Sablefish (K) Licence	250,000	46	11,500,000	n.a.
Sablefish Quota (j-cut)	32.00	4,402,939	140,894,048	2.40
Sablefish Value			152,394,048	

Valuation Considerations

- Licence values range from \$200,000 to asking prices of \$300,000. The escalation in licence values is baffling to industry participants, who believe that, under integrated groundfish fishing, distinctions between various groundfish licences should blur, and values should diminish.
- Quota prices ranged from \$32 to \$36 per pound, with \$32 a reflective rate at the valuation date (March 31, 2007). Quota prices may have softened slightly after the valuation date.
- Quota leases within the sablefish fleet average \$2.20 per pound, with leases of quota to other groundfish sectors (a small minority of transaction volume) in the \$2.60 per pound range.

Valuation Comments

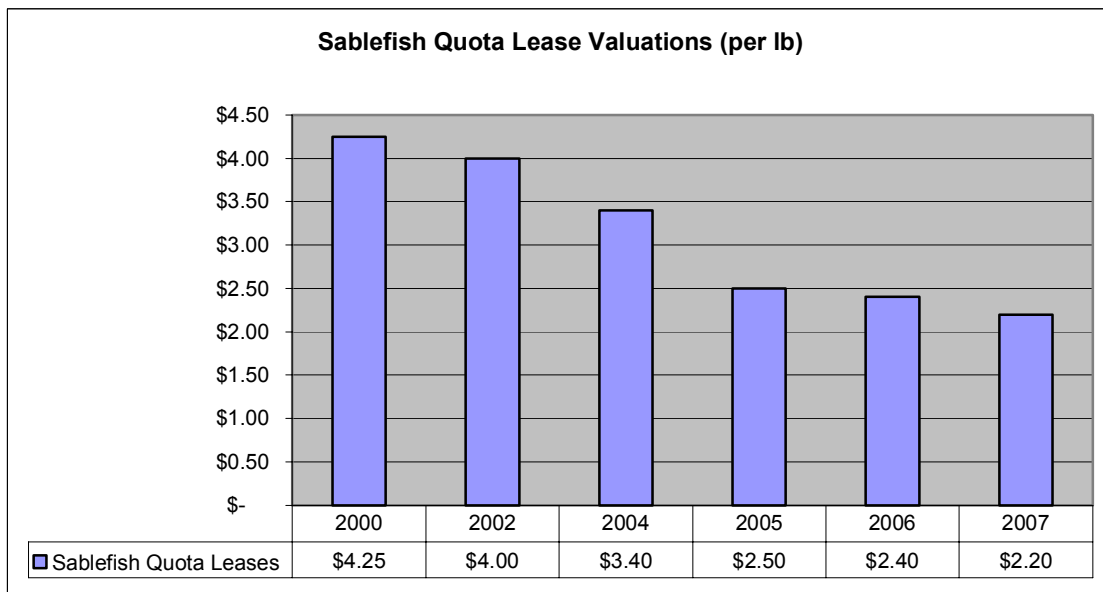
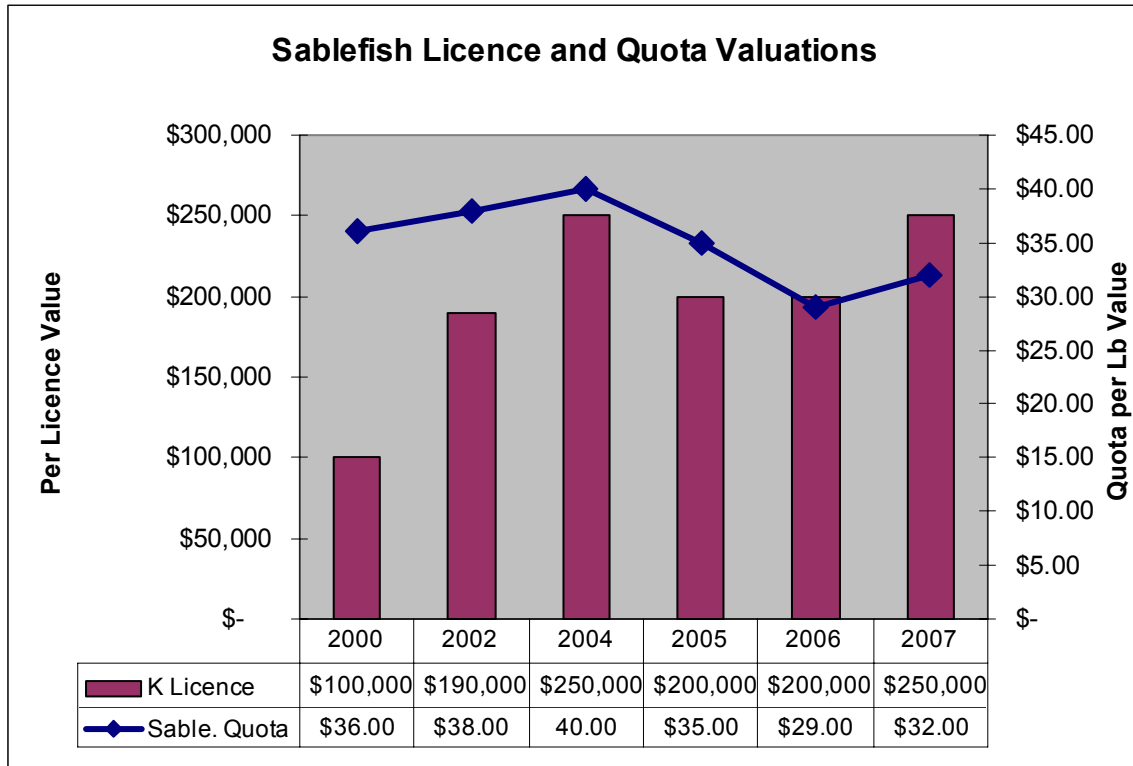
- Average vessel length is 63 feet.
- Quota valuations are per “j-cut” pound, which is about 68% of fresh round weight.

Vessel Value

Vessel counts exclude F licences and are best-estimates.

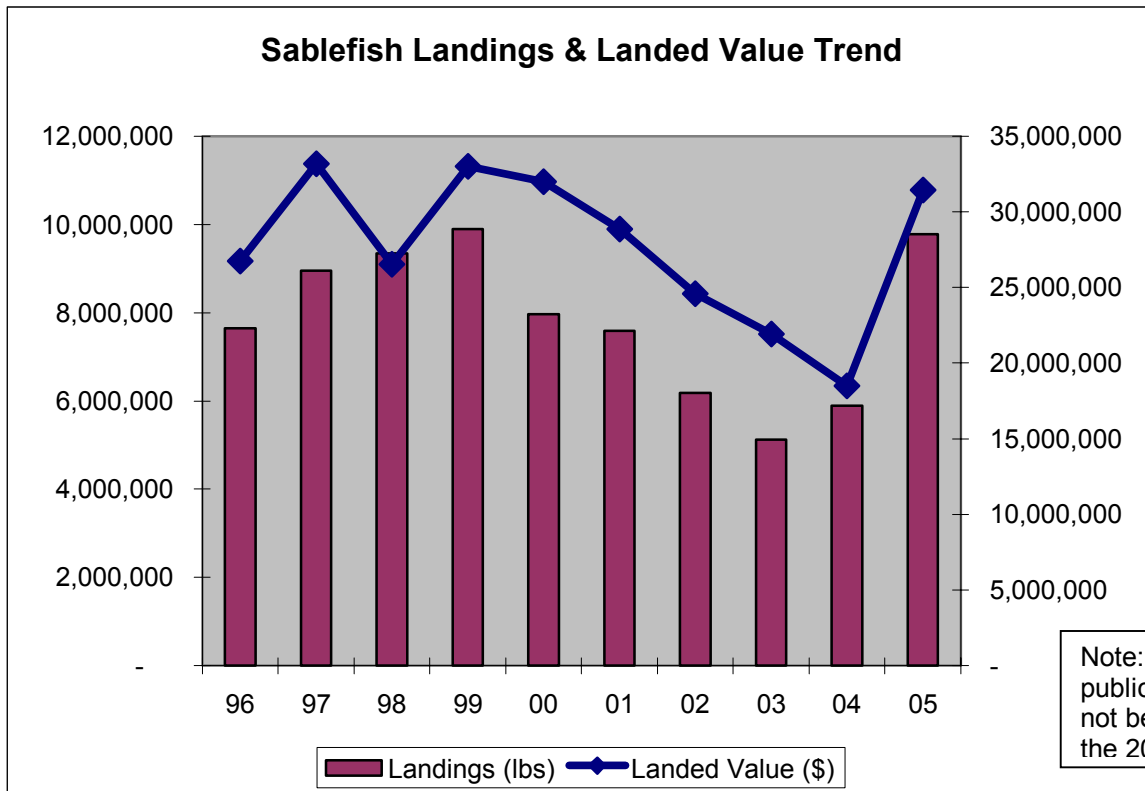
Vessel Type		Classic Style			Modern Style		Total / Average
		Wood	Aluminum / Fibreglass	Steel	Aluminum / Fibreglass	Steel	
Inside Waters / Smaller Vessel	Est # Vessels	1	2	-	4	-	7
	Unit Value	25,000	125,000	-	300,000	-	210,714
	Aggregate Val.	25,000	250,000	-	1,200,000	-	1,475,000
Outside Waters / Larger Vessel	Est # Vessels	7	7	6	6	13	39
	Unit Value	65,000	175,000	200,000	400,000	500,000	302,051
	Aggregate Val.	455,000	1,225,000	1,200,000	2,400,000	6,500,000	11,780,000
Total / Average	Est # Vessels	8	9	6	10	13	46
	Average Value	60,000	163,889	200,000	360,000	500,000	288,152
	Aggregate Val.	480,000	1,475,000	1,200,000	3,600,000	6,500,000	13,255,000

Valuation Trends



- Declining lease rates reflect both resistance from lessors to pay untenable lease rates, and a slight erosion in ex-vessel fish values.

Landings & Landed Value Trends



<i>Avg Landings per Licence (lbs, 2005)</i>	203,640
<i>Avg Landed Value/Licence (2005):</i>	654,724

Outlook

- Sablefish remains a fundamentally strong fishery, well-managed, and enjoying generally firm markets.
- Declining quotas in recent years have had a dampening effect on values.
- Adaptation by the sablefish sector to the groundfish integration program is progressing quite smoothly.
- The sablefish industry is gravely concerned about the potential effects of sablefish aquaculture on BC's wild sablefish resource and on markets and values for product.

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>	55
<i>No. of Commercial Communal Lic's (not valued in this study)</i>	nil
<i>Licensing/Management Framework</i>	<p>Area Licensing: three areas, the north coast, WCVI, and inside waters of Vancouver Island. Each of the 55 “G” licence eligibilities selects an area annually. The number of licence eligibilities fishing each area may change annually according to the proportion of the total quota assigned to each area.</p> <p>Licence stacking allowed, 3 licences maximum per vessel.</p> <p>Quota management – each licence may harvest 1/55 of the total quota, or 62,500 lbs in 2006</p>
<i>Valuation Criteria (Stratification)</i>	<p>Valuation is on a per-licence basis – each licence possesses the same value</p> <p>Vessels are stratified by size, construction material, and capability</p>
<i>Additional Information</i>	<p>Dive fishery.</p> <p>41 vessels currently operating the 55 licences. Quotas not divisible.</p> <p>Vessel-based licence allows harvest of Schedule II species and transporting (packing).</p>

Valuations Performed

Valuations	Purchase and Sale			Lease		
	<i>Valuation Conducted?</i>	<i>Sample Size</i>	<i>Confidence Level</i>	<i>Valuation Conducted?</i>	<i>Sample Size</i>	<i>Confidence Level</i>
Licence	Yes	Nil	Very Low	Yes	<3	Low
Quota	n.a.			n.a.		
Vessel	Yes	<3	Low	n.a.		

Current Valuation

Licence Value at March 31, 2007

Licence Category	Value per Licence	# Licences	Total Value, All Licences (\$)	Annual Lease Rate (\$)
Geoduck (G) Licence	\$ 2,500,000	55	137,500,000	350,000

Valuation Considerations

- there have been no known transactions in this fishery for several years (covering the last six valuation reports), so valuation is extremely subjective.
- Valuation estimates range from \$2 million to \$3.5 million.
- There is no basis for changing the (long-standing) value estimate of \$2.5 million per licence.
- Lease rates, too, are difficult to verify, so the prior years' valuation of \$350,000 per season is maintained.

Valuation Comments

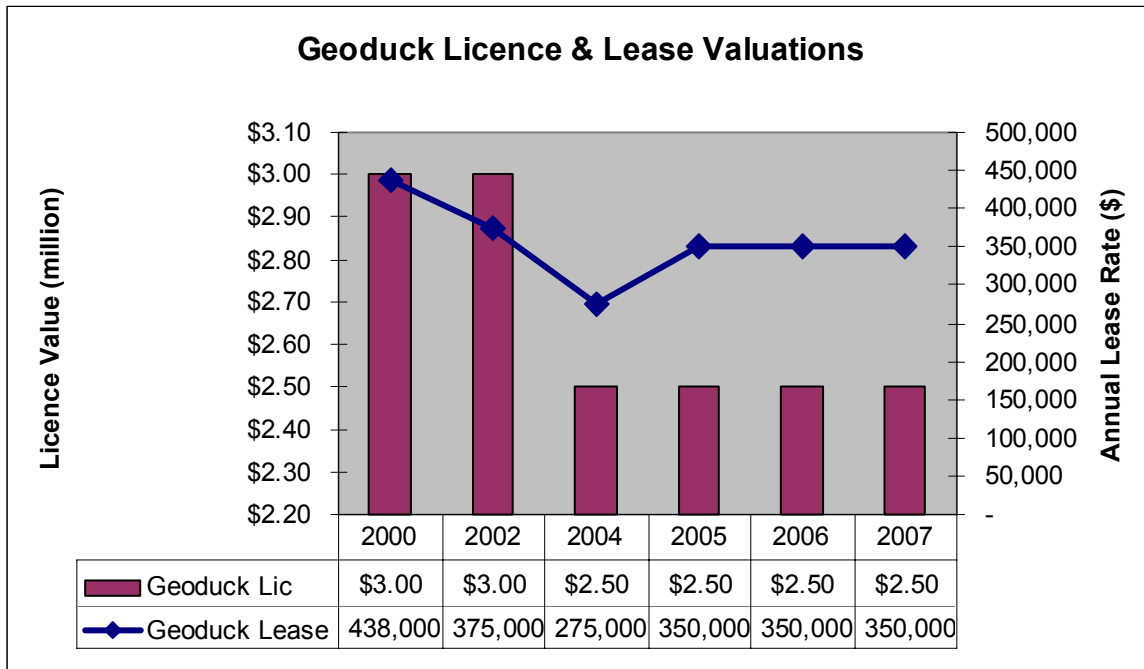
- Lease rates are often based on a revenue-sharing formula.

Vessel Value

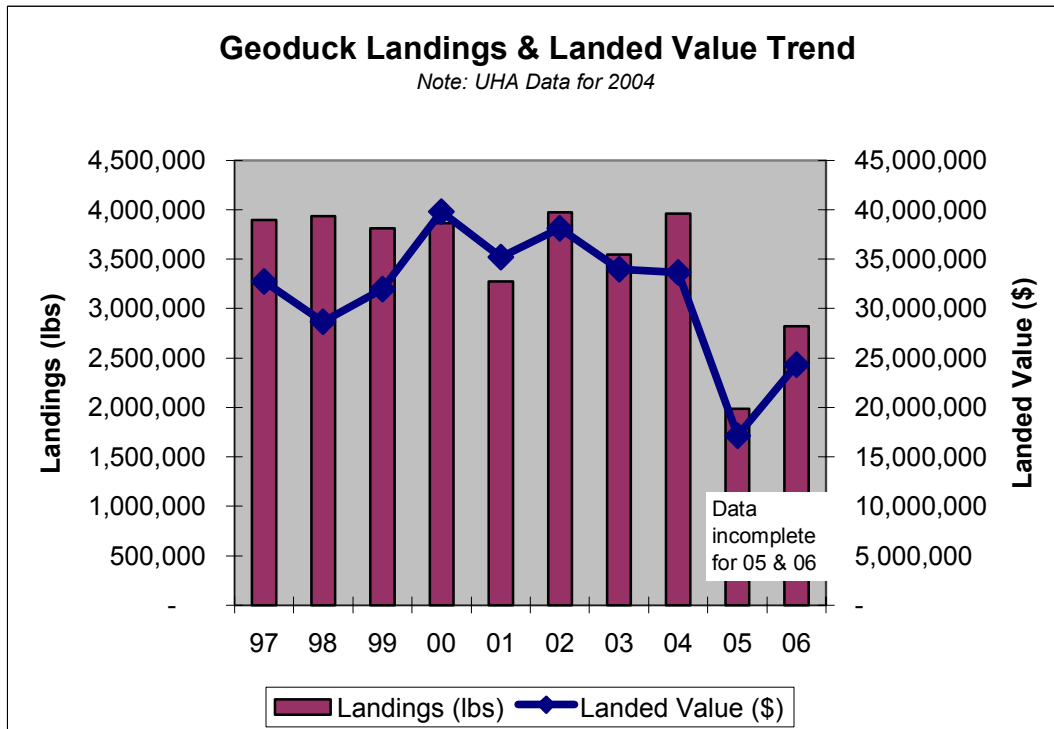
Vessel counts exclude F licences and are best-estimates.

Vessel Type		Classic Style			Modern Style		Total / Average
		Wood	Aluminum / Fibreglass	Steel	Aluminum / Fibreglass	Steel	
Inside Waters / Smaller Vessel	Est # Vessels	3	6	-	4	-	13
	Unit Value	10,000	10,000	-	75,000	-	30,000
	Aggregate Val.	30,000	60,000	-	300,000	-	390,000
Outside Waters / Larger Vessel	Est # Vessels	3	15	2	8	-	28
	Unit Value	15,000	40,000	50,000	125,000	-	62,321
	Aggregate Val.	45,000	600,000	100,000	1,000,000	-	1,745,000
Total / Average	Est # Vessels	6	21	2	12	-	41
	Average Value	12,500	31,429	50,000	108,333	-	52,073
	Aggregate Val.	75,000	660,000	100,000	1,300,000	-	2,135,000

Valuation Trends



Landings & Landed Value Trends



<i>Avg Landings per Licence (lbs, 2004)</i>	71,968
<i>Avg Landed Value/Licence (2004):</i>	\$ 611,000

Outlook

- Geoduck has long been a lucrative fishery, with the bulk of sales into the growing China market. The fishery is well managed and quotas are stable and fully utilized.
- Rapid pace of growth of the Chinese economy a positive - selling into a growing market.
- Prices are down about 10% in the current year, with impacts being felt from increasing competition from Mexico, Alaska, and Washington State.
- The strengthening Canadian dollar also has a negative impact on product values.
- Impacts of the Species at Risk Act implementation: the sea otter recovery program has an adverse impact on geoduck stocks, geoducks being a favored diet of sea otters; as sea otter abundance and range grows, so does the impact on geoduck biomass.
- Though the geoduck sector faces significant challenges, it is well positioned to confront them.

SHRIMP (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>	234
<i>No. of Commercial Communal Lic's (not valued in this study)</i>	11 (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>Valuation Criteria (Stratification)</i>	Licences are valued per-foot. Vessels are stratified by size, construction material, and capability.
<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).

Valuations Performed

Valuations	Purchase and Sale			Lease		
	<i>Valuation Conducted?</i>	<i>Sample Size</i>	<i>Confidence Level</i>	<i>Valuation Conducted?</i>	<i>Sample Size</i>	<i>Confidence Level</i>
Licence	Yes	5-10	Med	n.a.		
Quota	n.a.			n.a.		
Vessel	Yes	<3	Low	n.a.		

Current Valuation

Licence Value at March 31, 2007

Licence Category	Value per Foot	Est # Feet	Total Value, All Licences (\$)
Shrimp Trawl (S) Licence	\$ 1,100	9,594	10,553,400

Valuation Considerations

- There is significant trading volume in this category, though values remain low.
- For short and medium length licences, values are about \$1,000 per foot. “Long” licences (45’ or greater) may trade as high as \$2,000 per foot. The bulk of transactions, however, involve shorter licences.

Valuation Comments

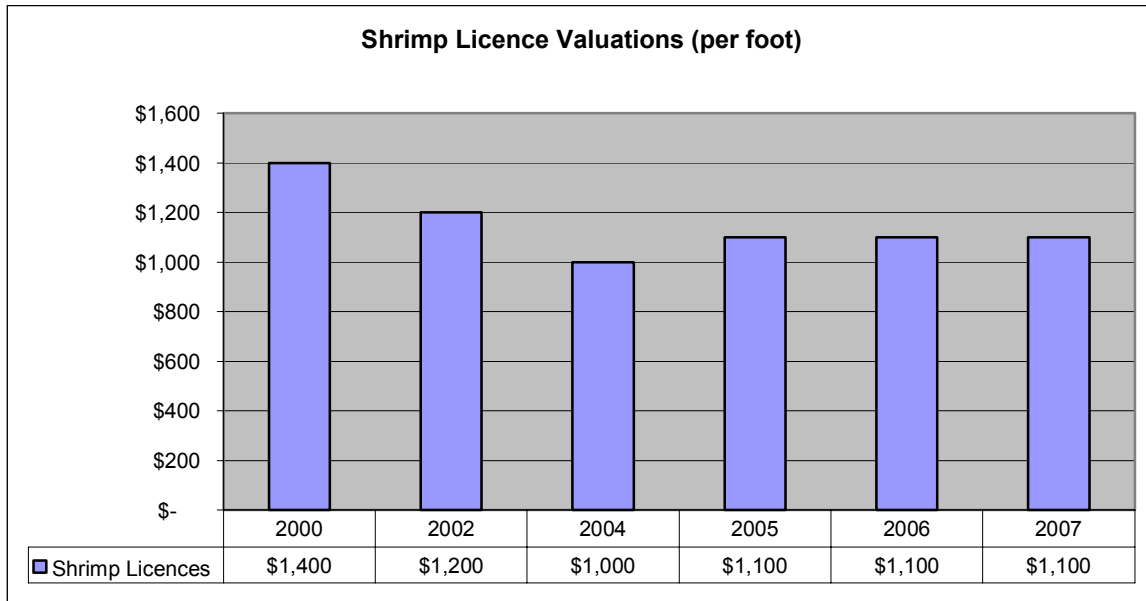
- The average vessel length is estimated at 41 feet; average licence value \$45,100
- Little has changed in this fishery in recent years - participation is sporadic, pink shrimp values are low, and asset values have remained low.
- No ATP purchases this year.

Vessel Value

Vessel counts exclude F licences and are best-estimates.

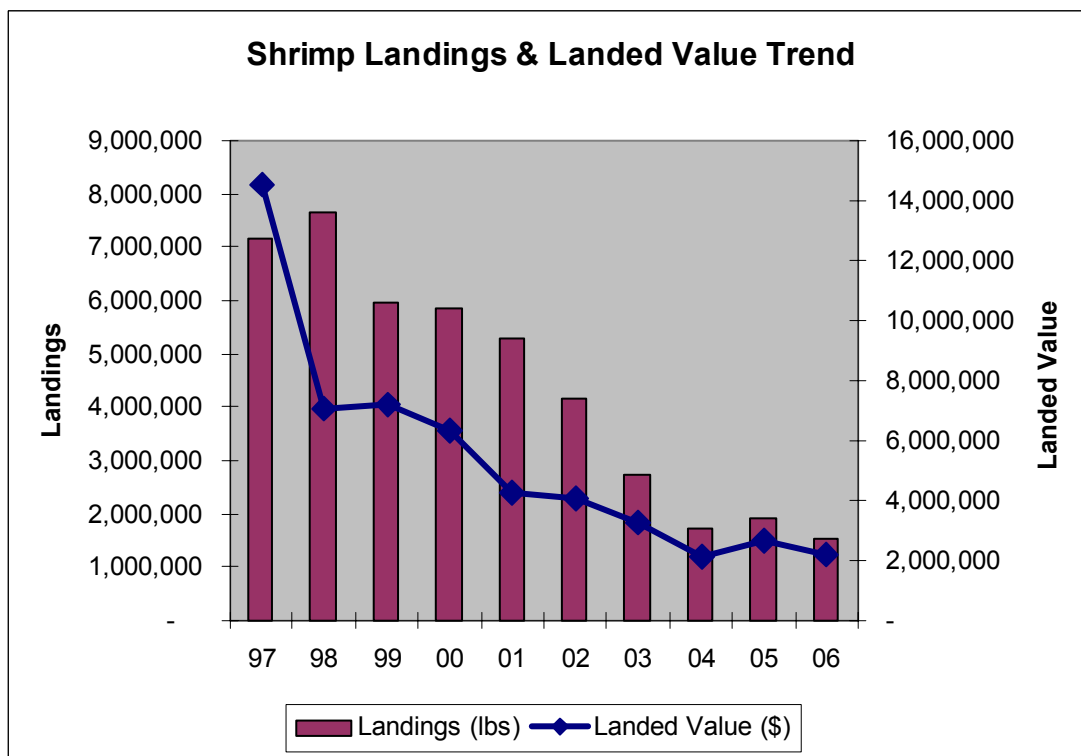
Vessel Type		Classic Style			Modern Style		Total / Average
		Wood	Aluminum / Fibreglass	Steel	Aluminum / Fibreglass	Steel	
Inside Waters / Smaller Vessel	Est # Vessels	22	31	3	6	3	65
	Unit Value	15,000	25,000	40,000	75,000	100,000	30,385
	Aggregate Val.	330,000	775,000	120,000	450,000	300,000	1,975,000
Outside Waters / Larger Vessel	Est # Vessels	31	87	15	22	14	169
	Unit Value	35,000	50,000	125,000	300,000	400,000	115,444
	Aggregate Val.	1,085,000	4,350,000	1,875,000	6,600,000	5,600,000	19,510,000
Total / Average	Est # Vessels	53	118	18	28	17	234
	Average Value	26,698	43,432	110,833	251,786	347,059	91,816
	Aggregate Val.	1,415,000	5,125,000	1,995,000	7,050,000	5,900,000	21,485,000

Valuation Trends



- Values have been very consistent in this fishery - at very low levels.

Landings & Landed Value Trends



<i>Avg Landings per Licence (lbs, 2006)</i>	6,320
<i>Avg Landed Value/Licence (2006):</i>	\$ 8,909

- The majority of the shrimp fleet is inactive, so values per active licence are substantially higher than those shown above.

Outlook

- The BC shrimp fishery has been impacted by the development of an industrial shrimp fishery in Atlantic Canada, with prices for pink shrimp having dropped dramatically.
- The fleet has access to a small volume of high-value species (eg. Side-stripe) and large quantities of low value shrimp (pink).
- The shrimp fishery has explored options for restoring financial viability in the fishery, but has been unable to implement a new fishery management regime.
- In the absence of a rationalized fishery, the BC shrimp fishery will likely remain an opportunistic one.

PRAWN (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>	245
<i>No. of Commercial Communal Lic's (not valued in this study)</i>	7 (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>Valuation Criteria (Stratification)</i>	Licences are valued per-foot. Vessels are stratified by size, construction material, and capability
<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).

Valuations Performed

Valuations	Purchase and Sale			Lease		
	<i>Valuation Conducted?</i>	<i>Sample Size</i>	<i>Confidence Level</i>	<i>Valuation Conducted?</i>	<i>Sample Size</i>	<i>Confidence Level</i>
Licence	Yes	5-10	Med	Yes	5-10	Med
Quota	n.a.			n.a.		
Vessel	Yes	<3	Low	n.a.		

Current Valuation

Licence Value at March 31, 2007

Licence Category	Value per Foot	Est # Feet	Total Value, All Licences (\$)	Annual Lease Rate (\$)
Prawn (W) Licence	\$ 17,000	8,943	152,022,500	30,000

Valuation Considerations

- Transactions range from \$14,000 to \$20,000 per foot. Short licences, used as “stackers” command a per-foot premium.
- Lease rates are estimated to average \$30,000 - “first” licences could be higher than \$30k, while “stackers” could be less.

Valuation Comments

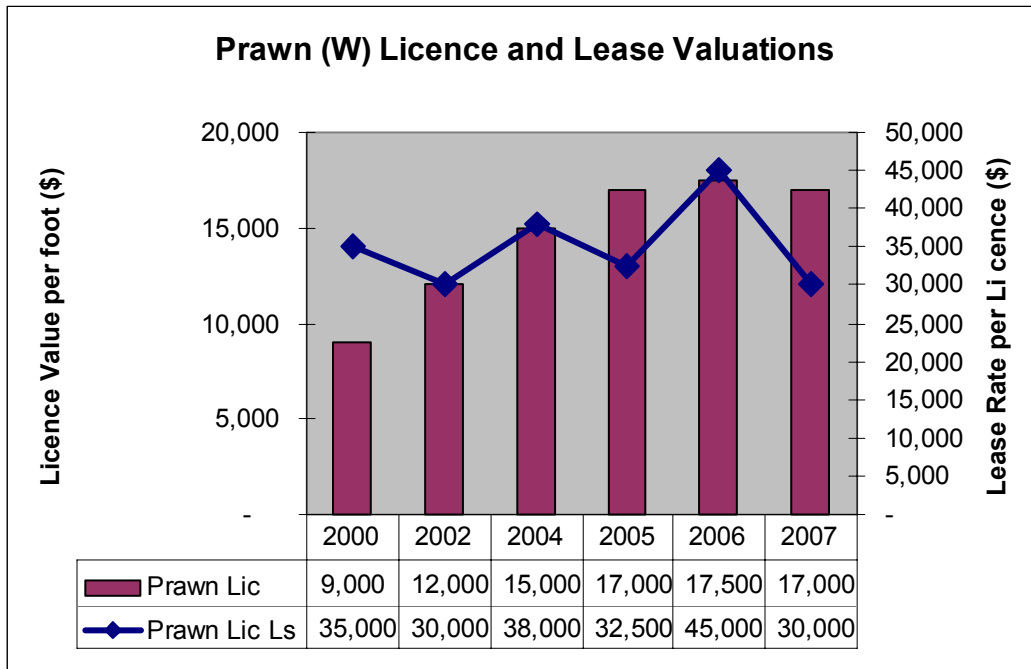
- Ex-vessel prices received in the 2007 fishery were down substantially from prior years (30-40%). This had a dampening effect on values, though this effect was felt largely after the March 31, 2007 valuation date.
- Average vessel length 36.5 feet; average licence value \$620,500.
- Valuation for prawn licences is confounded by the fact that many W licences are married to shrimp or other licences, and that many deals are “package” deals involving multiple licences, vessels, and gear. Thus, apportionment of value to the prawn licence may be quite arbitrary.
- Small licences are attractive for use as “stackers;” large licences are becoming attractive to salmon seine vessel owners seeking fishery diversification.

Vessel Value

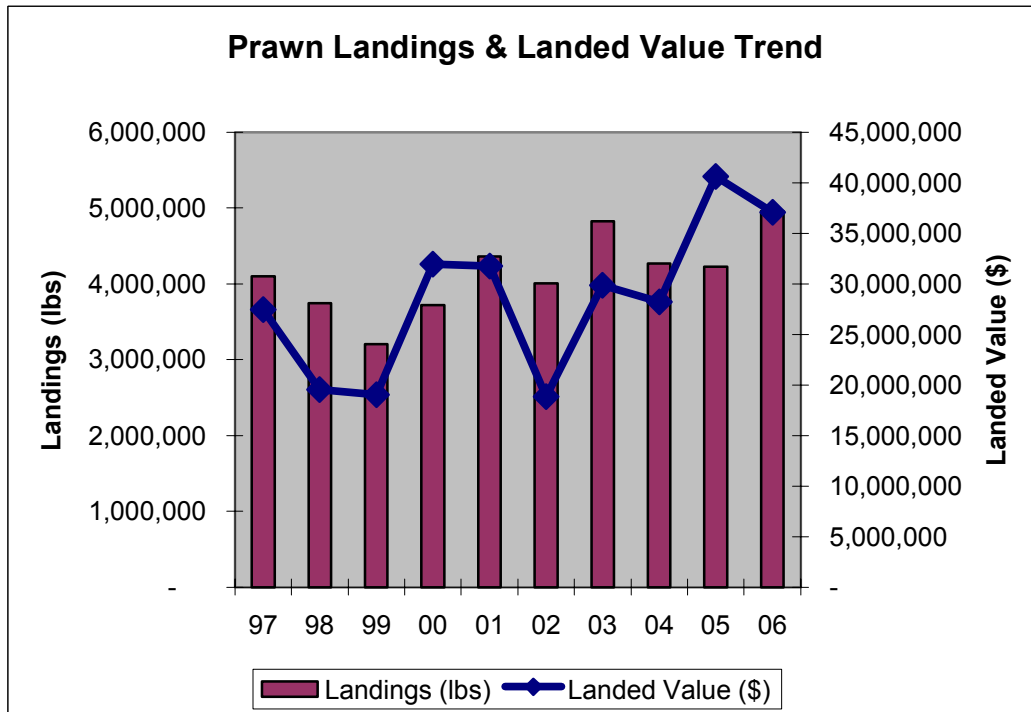
Vessel counts exclude F licences and are best-estimates.

Vessel Type		Classic Style			Modern Style		Total / Average
		Wood	Aluminum / Fibreglass	Steel	Aluminum / Fibreglass	Steel	
Inside Waters / Smaller Vessel	Est # Vessels	36	37	1	41	-	115
	Unit Value	15,000	50,000	65,000	100,000	-	57,000
	Aggregate Val.	540,000	1,850,000	65,000	4,100,000	-	6,555,000
Outside Waters / Larger Vessel	Est # Vessels	33	58	4	34	1	130
	Unit Value	35,000	80,000	100,000	300,000	400,000	129,192
	Aggregate Val.	1,155,000	4,640,000	400,000	10,200,000	400,000	16,795,000
Total / Average	Est # Vessels	69	95	5	75	1	245
	Average Value	24,565	68,316	93,000	190,667	400,000	95,306
	Aggregate Val.	1,695,000	6,490,000	465,000	14,300,000	400,000	23,350,000

Valuation Trends



Landings & Landed Value Trends



<i>Avg Landings per Licence (lbs, 2006)</i>	19,676
<i>Avg Landed Value/Licence (2006):</i>	147,158

Outlook

- With a sharp correction in the Japanese market encountered during the 2007 season, values have moderated slightly in this fishery.
- The prawn fishery is in a cycle of shorter fishing seasons, increasing competition for fish, un-necessarily high operating costs, and un-even service of markets (eg. failure to maximize live product and optimise the size assortment).
- The prawn fishery is currently constrained by the short duration of fishing seasons - a longer season could allow for improved product and market development (eg. more valuable size assortment, live product).
- The industry is currently engaged in a Future Management Options exercise to explore fishery strategies for improving economic performance, including fishery management reform and marketing initiatives.
- There was some sentiment amongst individuals consulted that prawn values are due for a correction unless fundamental issues are addressed.

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>	141
<i>No. of Commercial Communal Lic's (not valued in this study)</i>	1 (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>Valuation Criteria (Stratification)</i>	Licences are valued on a per-foot basis, quota on a per pound basis. Groundfish and hake are valued separately. Vessels are stratified by size, construction material, and capability
<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).

Valuations Performed

Valuations	Purchase and Sale			Lease		
	Valuation Conducted?	Sample Size	Confidence Level	Valuation Conducted?	Sample Size	Confidence Level
Licence	Yes	<3	Med	n.a.		
Quota	Yes	5-10	Med	Yes	5-10	Med
Vessel	Yes	<3	Low	n.a.		

Current Valuation

Licence and Quota Value at March 31, 2007

<i>Licence Category</i>	<i>Value per Foot / lb of Quota</i>	<i>Est # Feet / Lbs of Quota</i>	<i>Total Value, All Licences (\$)</i>	<i>Annual Lease Rate (\$)</i>
Groundfish Licence	\$ 1,300	8,883	11,547,900	n.a.
Groundfish Quota (uncut)	\$ 1.85	88,713,104	164,119,242	0.15
Coastwide Hake Quota	\$ 0.60	187,391,000	112,434,600	0.06
Gulf Hake Quota	\$ 0.10	22,046,000	2,204,600	n.a.
Arrowtooth Flounder Quota (Turbot)	\$ 0.40	33,069,000	13,227,600	0.02
Total			290,306,342	

Valuation Considerations

- Licence prices range from \$1,000 to \$2,000 per foot, with longer licences valued higher. Also, licences with a higher holdings cap possess greater value than those with minimal holdings cap potential.
- Uncut quota range from \$1.50 to \$2.00 per pound, down substantially from last year's level of \$2.85.
- Offshore hake quota value remained strong, with the bulk of transactions at the 60 cent level, but with some movement in the 62-70 cent range.
- Arrowtooth flounder (turbot) markets remain soft, with values in the 40 cent per pound range (vs. 50 cents last year).
- Leases: uncut groundfish quota leases averaged 15 cents per pound during the valuation period, but have likely softened since (to perhaps 10 cents). More groundfish trawl quota is leasing on a "cut" (individual species, not the spectrum of species) basis, at premium prices, and in small quantities to the other groundfish sectors. Hake quota leases were in the 6 cent/lb range at the valuation date, but have diminished as the season has progressed (4-5 cents).

Valuation Comments

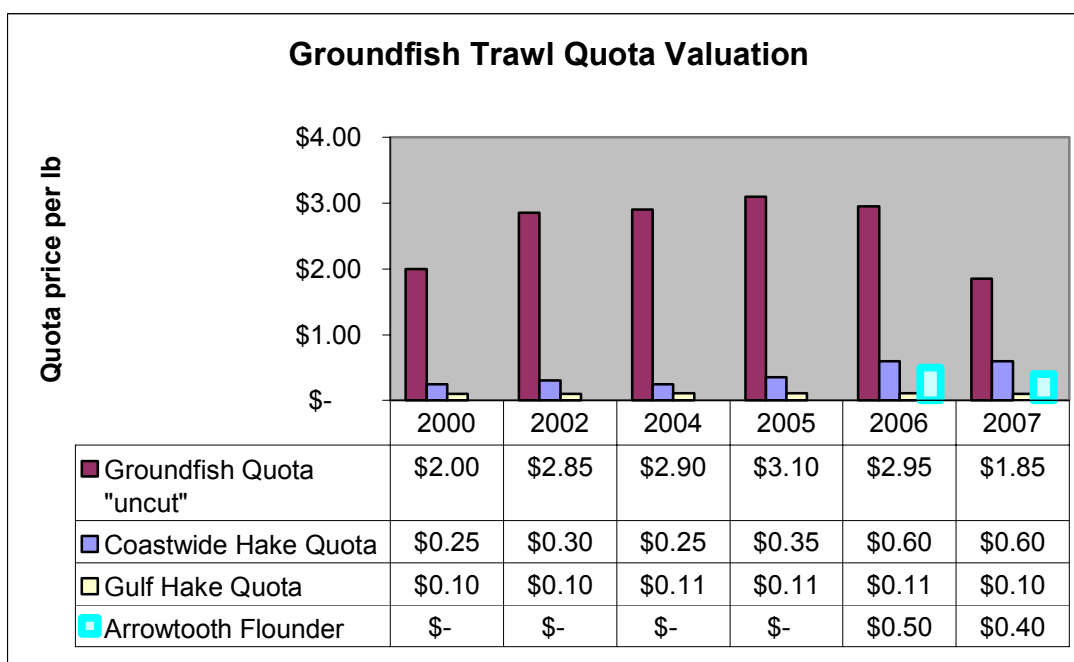
- The continuing appreciation of the Canadian dollar continues to crimp groundfish trawl wholesale revenues and ex-vessel prices. This, combined with high fuel prices, has had a serious negative impact on bottomfish operations.
- Hake markets remain strong, with record prices paid to harvesters in the last two seasons in spite of the strong \$CDN. However, catches for hake were poor in the early part of the 2007 season (through August), resulting in declining values for hake quota and leases after the valuation date (March 31, 2007).
- There is a trend toward more "cut" quota transactions, particularly in this era of integrated groundfish.
- Average vessel length 62 feet; average licence value \$81,900 (without quota).

Vessel Value

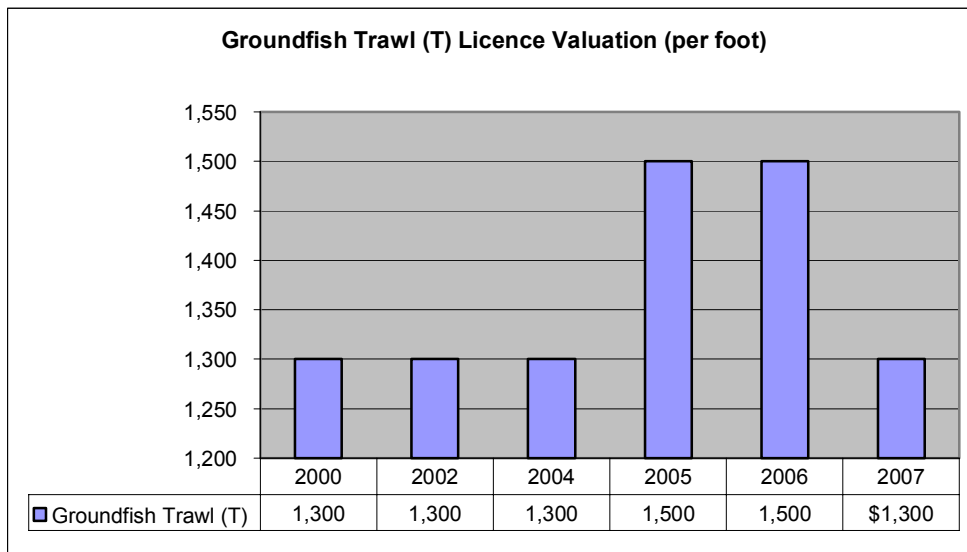
Vessel counts exclude F licences and are best-estimates.

Vessel Type		Classic Style			Modern Style		Total / Average
		Wood	Aluminum / Fibreglass	Steel	Aluminum / Fibreglass	Steel	
Inside Waters / Smaller Vessel	Est # Vessels	6	6	2	6	1	21
	Unit Value	15,000	60,000	65,000	200,000	300,000	99,048
	Aggregate Val.	90,000	360,000	130,000	1,200,000	300,000	2,080,000
Outside Waters / Larger Vessel	Est # Vessels	19	9	40	15	37	120
	Unit Value	65,000	175,000	300,000	400,000	600,000	358,417
	Aggregate Val.	1,235,000	1,575,000	12,000,000	6,000,000	22,200,000	43,010,000
Total / Average	Est # Vessels	25	15	42	21	38	141
	Average Value	53,000	129,000	288,810	342,857	592,105	319,787
	Aggregate Val.	1,325,000	1,935,000	12,130,000	7,200,000	22,500,000	45,090,000

Valuation Trends

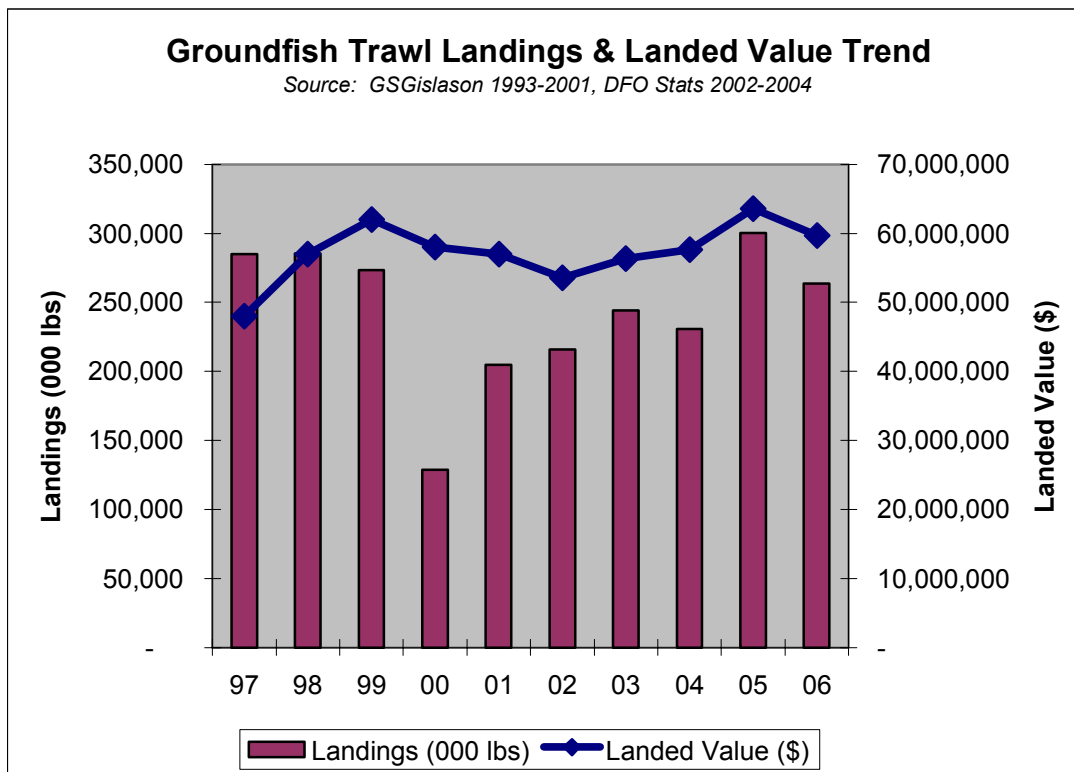


- With the addition of arrowtooth flounder to the IQ program, this quota is now traded.



- Groundfish trawl quota lease rates have fallen as the Canadian dollar has appreciated and fuel costs have risen.
- Offshore hake quota lease rates have risen as demand for Pacific hake has firmed in the last few years.
- No valuation for gulf hake quota leases in recent years; low value and utilization by the fleet contribute to no discernable market for quota.

Landings & Landed Value Trends



Avg Landings per Licence (000 lbs, 2006)	1,857
Avg Landed Value/Licence (2006):	\$ 420,000

Outlook

- In spite of stable quotas and sound fishery management, the groundfish trawl (bottomfish) sector is experiencing a decline in asset values related to a rising Canadian dollar and spiralling fuel prices.
- Due to very strong market demand, particularly in Russia and China, and abetted by poor catches in Argentina, the BC hake business is showing significant strength. Sporadic catches during the 2007 season are a cause for concern, however.
- The groundfish trawl industry is relatively cohesive and proactive, and is launching initiatives to confront challenges:
 - A study on the impacts of leasing costs on vessel and crew profitability, with a view to ensuring that leasing does not unduly “drain” income from the working fleet.
 - Formation of the BC Groundfish Marketing Association - to explore means of improving quality and consistency of supply, and new avenues for marketing BC bottomfish products.

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>	206
<i>No. of Commercial Communal Lic's (not valued in this study)</i>	16 (FR designation, Party-based)
<i>Licensing/Management Framework</i>	Area Licensing – 7 areas. No stacking allowed – must select a single area. Area re-selection generally allowed every 3 years; a re-selection was completed in September, 2005 to apply to the years 2006-08. Fishery managed on basis of time, area, size, sex, and trap limits (limits vary by area)
<i>Valuation Criteria (Stratification)</i>	Licences valued on a per foot basis Vessels are stratified by size, construction material, and capability
<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 small market is emerging for FR (commercial communal party-based) licences.

Valuations Performed

Valuations	Purchase and Sale			Lease		
	<i>Valuation Conducted?</i>	<i>Sample Size</i>	<i>Confidence Level</i>	<i>Valuation Conducted?</i>	<i>Sample Size</i>	<i>Confidence Level</i>
Licence	Yes	5-10	Med	n.a.		
Quota	n.a.			n.a.		
Vessel	Yes	<3	Low	n.a.		

Current Valuation

Licence Value at March 31, 2007

Licence Category	Value per Foot	Est # Feet	Total Value, All Licences (\$)
Crab (R) Licence	\$ 14,000	6,592	92,288,000

Valuation Considerations

- Transaction values range from \$11,000 to \$16,000 per foot.
- With seven areas and a wide range of vessel size, valuation is complicated. Apportionment of asset values is also a challenge in the crab fishery (that is, how the vessel, gear, crab licence, and other fishing licences are valued in a given transaction may be arbitrary).
- Some of the FR licences are leased annually, at rates in the \$20,000-\$30,000 range.

Valuation Comments

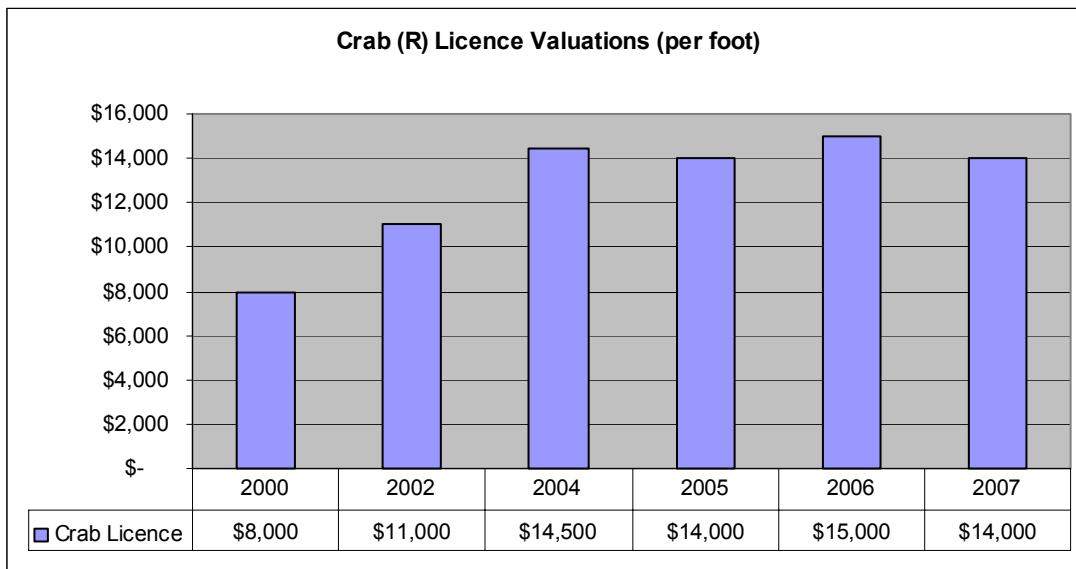
- Average vessel 32 feet; average licence value \$448,000
- Many of the south coast fishing areas have had “off” years in recent years. Areas A and B (QCI, north coast) have been relatively strong.
- Tri-annual area re-selection means that values do not vary by area as much as would otherwise be expected (i.e. poorer performing areas maintain values similar to the stronger areas).

Vessel Value

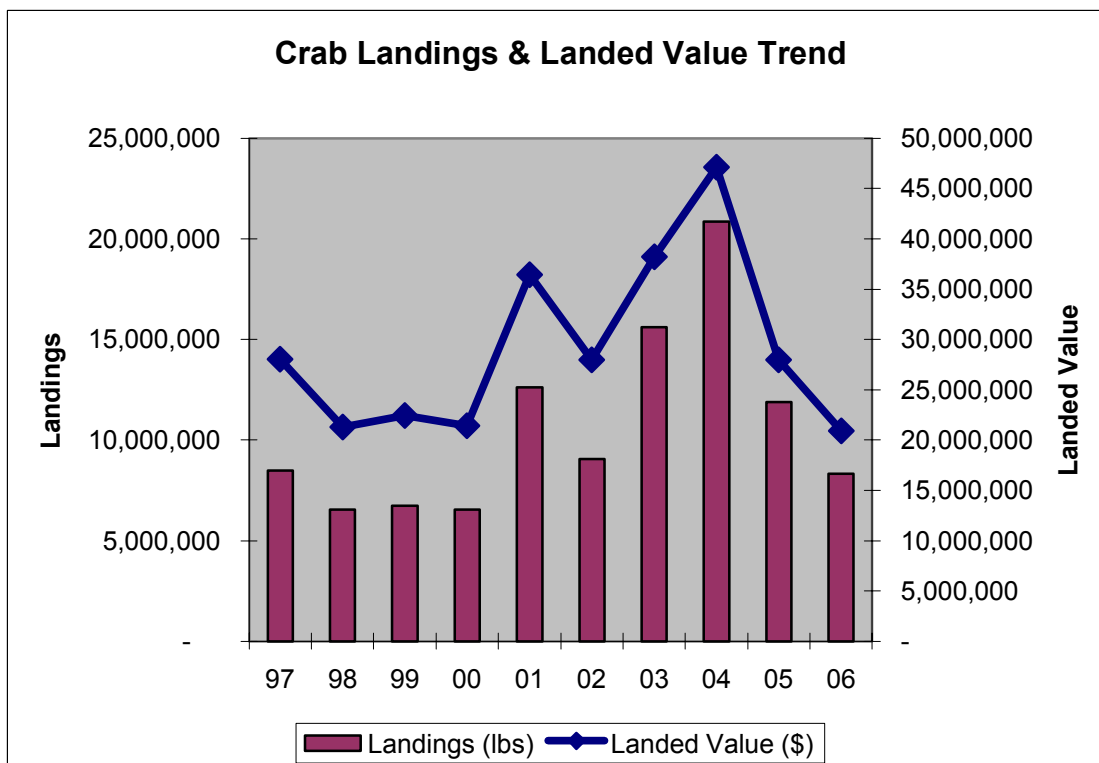
Vessel counts exclude F licences and are best-estimates.

Vessel Type		Classic Style			Modern Style		Total / Average
		Wood	Aluminum / Fibreglass	Steel	Aluminum / Fibreglass	Steel	
Inside Waters / Smaller Vessel	Est # Vessels	3	51	1	92	2	149
	Unit Value	15,000	50,000	65,000	100,000	125,000	81,275
	Aggregate Val.	45,000	2,550,000	65,000	9,200,000	250,000	12,110,000
Outside Waters / Larger Vessel	Est # Vessels	6	18	5	24	4	57
	Unit Value	35,000	80,000	100,000	300,000	400,000	192,105
	Aggregate Val.	210,000	1,440,000	500,000	7,200,000	1,600,000	10,950,000
Total / Average	Est # Vessels	9	69	6	116	6	206
	Average Value	28,333	57,826	94,167	141,379	308,333	111,942
	Aggregate Val.	255,000	3,990,000	565,000	16,400,000	1,850,000	23,060,000

Valuation Trends



Landings & Landed Value Trends



<i>Avg Landings per Licence (lbs, 2006)</i>	37,554
<i>Avg Landed Value/Licence (2006):</i>	\$ 94,341

- Results as shown in the above graphs are heavily skewed by Area A results (Area A had an “off” year in 2006).

Outlook

- The current economics of the crab fishery do not necessarily support high licence values.
- There are fishery management issues to be dealt with, including mortality associated with soft-shell, undersize, and female crabs. DFO is also considering measures to improve the First Nations and recreational access to crabs, as it is felt that these harvesters cannot compete against the commercial sector.
- It is widely believed that there are too many crab licences - that a high degree of fishing effort is negatively impacting achievement of both conservation and economic goals.
- The periodic (every three years) area reselection makes it difficult for area-groups to realize benefits of their stewardship efforts.
- Markets for live Dungeness crab are generally healthy - crab is a “luxury” item with strong demand.

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 Commercial Communal 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 – 14,615 pounds per licence under current fishing plan Area Licensing – 4 areas: North, Central, WCVI, St. of Georgia Stacking allowed – maximum 5 licences per vessel
<i>Valuation Criteria (Stratification)</i>	Valuation is on a per-licence basis – each licence possesses the same value (no difference by area) Vessels are stratified by size, construction material, and capability
<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. Currently approx. 31 vessels operating the 85 licences.

Valuations Performed

Valuations	Purchase and Sale			Lease		
	<i>Valuation Conducted?</i>	<i>Sample Size</i>	<i>Confidence Level</i>	<i>Valuation Conducted?</i>	<i>Sample Size</i>	<i>Confidence Level</i>
Licence	Yes	nil	Low	Yes	<3	Low
Quota	n.a.			n.a.		
Vessel	Yes	<3	Low	n.a.		

Current Valuation

Licence Value at March 31, 2007

<i>Licence Category</i>	<i>Value per Licence</i>	<i># Licences</i>	<i>Total Value, All Licences (\$)</i>	<i>Annual Lease Rate (\$)</i>
Sea Cucumber (ZD) Licence	\$ 175,000	85	14,875,000	17,000

Valuation Considerations

- No actual transactions were unearthed this year; this is a very tightly held fishery.
- Valuation is based on discussion of values and potential transactions. Range in estimated valued is \$150,000 to \$200,000.
- Lease rates per licence range from \$15,000 to \$20,000 with \$17,000 deemed to be a reflective overall rate.

Valuation Comments

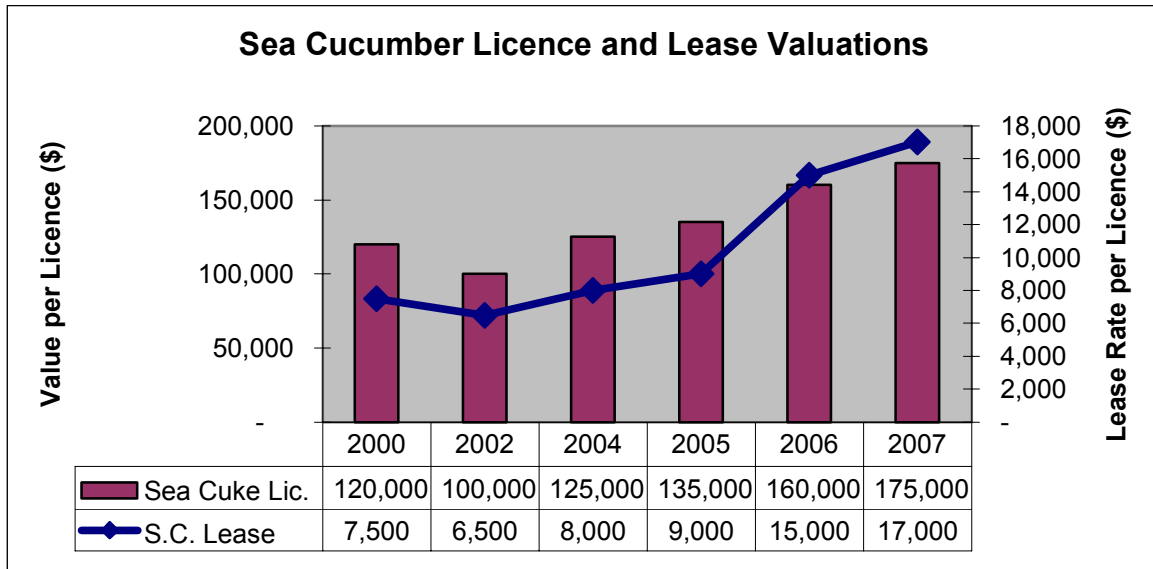
- Values and markets in the fishery appear to be strengthening, though a lack of transactions make valuation imprecise.

Vessel Value

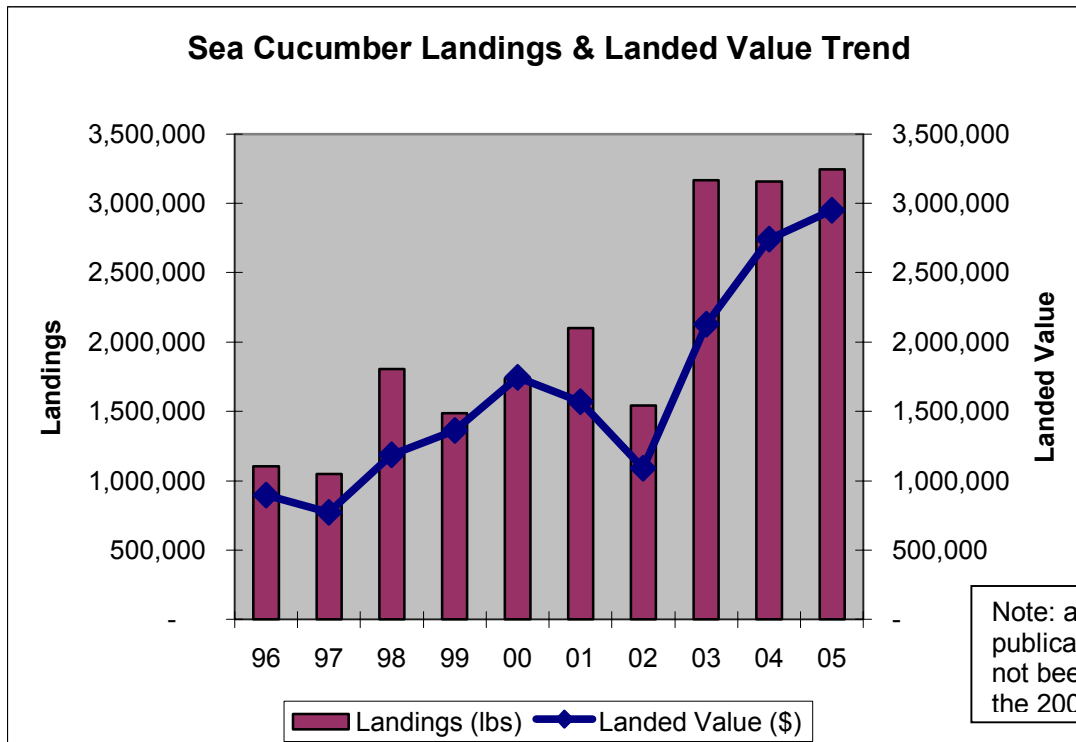
Vessel counts exclude F licences and are best-estimates.

Vessel Type		Classic Style			Modern Style		Total / Average
		Wood	Aluminum / Fibreglass	Steel	Aluminum / Fibreglass	Steel	
Inside Waters / Smaller Vessel	Est # Vessels	1	9	-	13	-	23
	Unit Value	10,000	10,000	-	75,000	-	46,739
	Aggregate Val.	10,000	90,000	-	975,000	-	1,075,000
Outside Waters / Larger Vessel	Est # Vessels	-	4	-	4	-	8
	Unit Value	-	40,000	-	125,000	-	82,500
	Aggregate Val.	-	160,000	-	500,000	-	660,000
Total / Average	Est # Vessels	1	13	-	17	-	31
	Average Value	10,000	19,231	-	86,765	-	56,968
	Aggregate Val.	10,000	250,000	-	1,475,000	-	1,735,000

Valuation Trends



Landings & Landed Value Trends



<i>Avg Landings per Licence (lbs, 2005)</i>	38,158
<i>Avg Landed Value/Licence (2005):</i>	\$ 34,717

Outlook

- Although a relatively small fishery in absolute terms, the sea cucumber industry has done an admirable job of improving both landings volumes and values over the past several years
- Continued conservative management combined with stock assessment work and improving product care are keys to future success
- Impacts from implementation of the Species at Risk act are uncertain

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>	99
<i>No. of Commercial Communal Lic's (not valued in this study)</i>	11 (FZC designation – Party-based)
<i>Licensing/Management Framework</i>	Quota management – each licence receives an equal share of the TAC – 96,706 pounds per licence under current fishing plan. Area Licensing – north and south coast. 93 licences in the north, 17 in the south. Stacking allowed – maximum 5 licences per vessel.
<i>Valuation Criteria (Stratification)</i>	Valuation is on a per-licence basis – each licence possesses the same value (no difference by area). Vessels are stratified by size, construction material, and capability.
<i>Additional Information</i>	Quotas not divisible. Currently 44 vessels fishing 100 licences. A lottery process is used for annual area selection.

Valuations Performed

Valuations	Purchase and Sale			Lease		
	Valuation Conducted?	Sample Size	Confidence Level	Valuation Conducted?	Sample Size	Confidence Level
Licence	Yes	3-5	Med	Yes	3-5	Med
Quota	n.a.			n.a.		
Vessel	Yes	<3	Low	n.a.		

Current Valuation

Licence Value at March 31, 2007

Licence Category	Value per Licence	# Licences	Total Value, All Licences (\$)	Annual Lease Rate (\$)
Red Urchin (ZC) Licence	\$ 75,000	99	7,425,000	1,500

Valuation Considerations

- Transactions (and estimates of value) range from \$50,000 to \$80,000 per licence.
- At current values, there is limited trading activity: licence holders are reluctant to sell at “fire sale” prices, whereas speculators are willing to purchase if values fall much further.
- Lease rates, estimated at \$25,000 per year only three years ago, are now near-nil - \$1,500 per licence is the current year valuation.

Valuation Comments

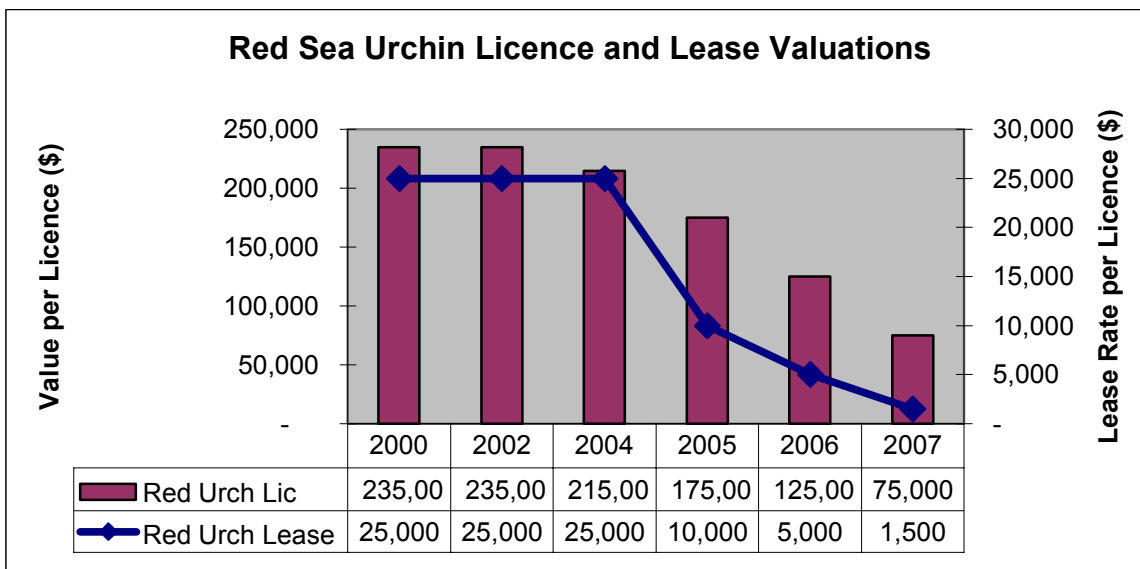
- The impact of Russian IUU product on the Japanese market continues to impair BC operations: participation of the red urchin fleet is sporadic, quotas will not be reached, processors are shutting down, and licence holders are seeking relief on cost-sharing programs.

Vessel Value

Vessel counts exclude F licences and are best-estimates.

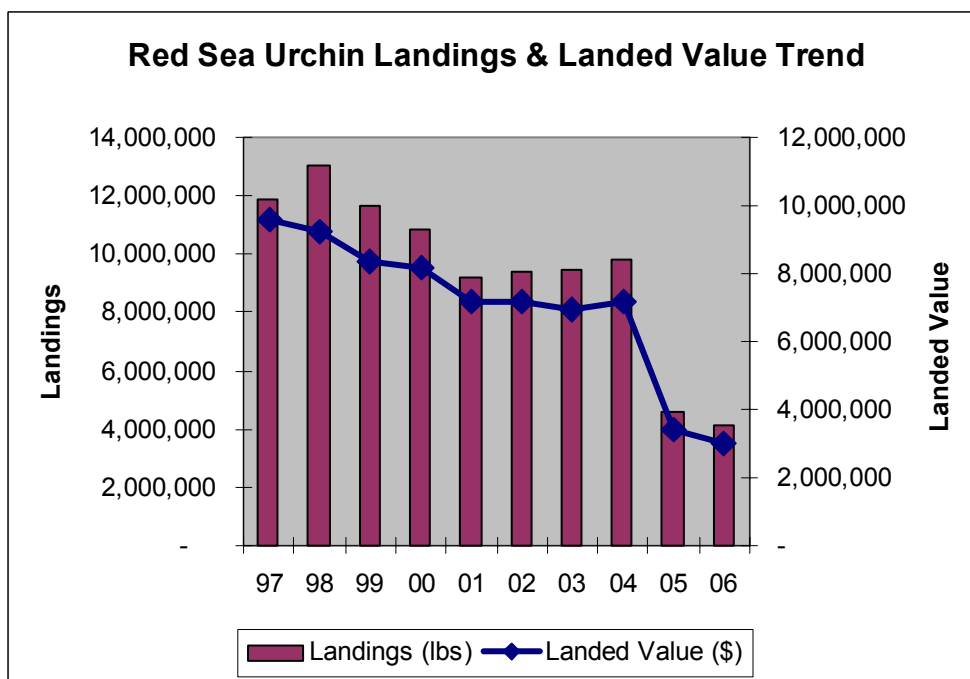
Vessel Type		Classic Style			Modern Style		Total / Average
		Wood	Aluminum / Fibreglass	Steel	Aluminum / Fibreglass	Steel	
Inside Waters / Smaller Vessel	Est # Vessels	1	15	-	18	-	34
	Unit Value	10,000	10,000	-	75,000	-	44,412
	Aggregate Val.	10,000	150,000	-	1,350,000	-	1,510,000
Outside Waters / Larger Vessel	Est # Vessels	-	3	-	7	-	10
	Unit Value	-	40,000	-	125,000	-	99,500
	Aggregate Val.	-	120,000	-	875,000	-	995,000
Total / Average	Est # Vessels	1	18	-	25	-	44
	Average Value	10,000	15,294	-	89,000	-	56,932
	Aggregate Val.	10,000	270,000	-	2,225,000	-	2,505,000

Valuation Trends



- A dramatic downward trend in licence and lease values (above) is related to plummeting prices and marketability for BC product in Japan. Because of weak prices, participation is only partial and the volume and value of landings has dropped sharply (below).

Landings & Landed Value Trends



<i>Avg Landings per Licence (lbs, 2006)</i>	37,355
<i>Avg Landed Value/Licence (2006):</i>	\$ 27,383

Outlook

- It is expected that only about 50% of the red urchin will be caught in 2007.
- A glut of product imported by Japan from the Russian “IUU” fishery (illegal, un-regulated, un-reported) remains the largest challenge to the BC industry.
- The urchin industry held a “Sea Urchin Summit” in February, 2007, bringing harvesters, processors, DFO managers, and DFO “international trade” representatives to explore means of dealing with the Russian IUU situation while providing temporary cost relief to urchin harvesters.
- It is uncertain how/when/if the current market flux will be resolved.
- Urchin stocks are currently healthy and the fishery is considered well-managed; stakeholders express frustration that, despite demonstrating a high level of resource stewardship, their industry is being undermined by external (illegal) forces.
- Excerpt from the Red Urchin fishery management plan:
Sea otter populations are expanding and because they are major predators on red sea urchins they are expected to have an impact on all red sea urchin fisheries in the future. The commercial industry has identified sea otters as the single largest threat to the stability of the fishery. It is believed that sea otters and commercial urchin harvesting cannot co-exist.
- It is reported that the WCVI has been closed to sea urchin fishing because of sea otter issues.

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 Commercial Communal 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. 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>Valuation Criteria (Stratification)</i>	Valuation is on a per-licence basis – each licence possesses the same value (no difference by area). Vessels are stratified by size, construction material, and capability
<i>Additional Information</i>	A three-year management plan in effect: 2003-2006 Quotas not divisible Currently 19 vessels (est.) fishing 49 licences.

Valuations Performed

Valuations	Purchase and Sale			Lease		
	Valuation Conducted?	Sample Size	Confidence Level	Valuation Conducted?	Sample Size	Confidence Level
Licence	Yes	Nil	Low	Yes	<3	Low
Quota	n.a.			n.a.		
Vessel	Yes	<3	Low	n.a.		

Current Valuation

Licence Value at March 31, 2007

<i>Licence Category</i>	<i>Value per Licence</i>	<i># Licences</i>	<i>Total Value, All Licences (\$)</i>	<i>Annual Lease Rate (\$)</i>
Green Urchin (ZA) Licence	\$ 20,000	49	980,000	nil

Valuation Considerations & Comments

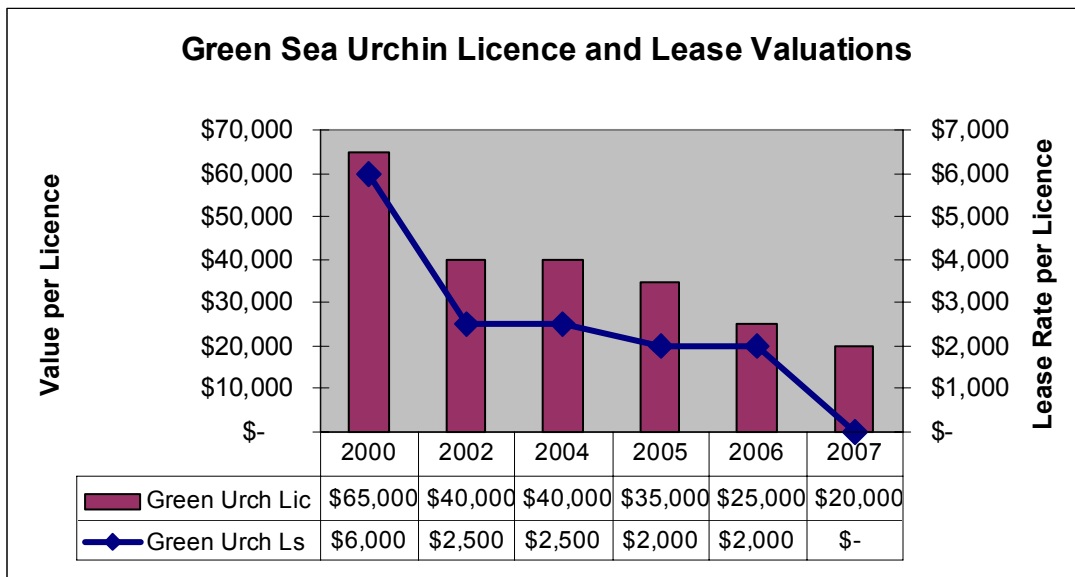
- No transactions unearthed - estimates of value range from \$10,000 - 30,000.
- The fishery is tightly held - there are only 49 licences - and holders appear unwilling to divest at current “bargain” prices.
- Lease rates are effectively nil. There is no incremental value to fishing further quota when operations are un-economical.
- As with the red sea urchin fishery, an influx of supply from Russia’s IUU (illegal, un-regulated, un-reported) fishery has devastated the market for BC green urchins in Japan.

Vessel Value

Vessel counts exclude F licences and are best-estimates.

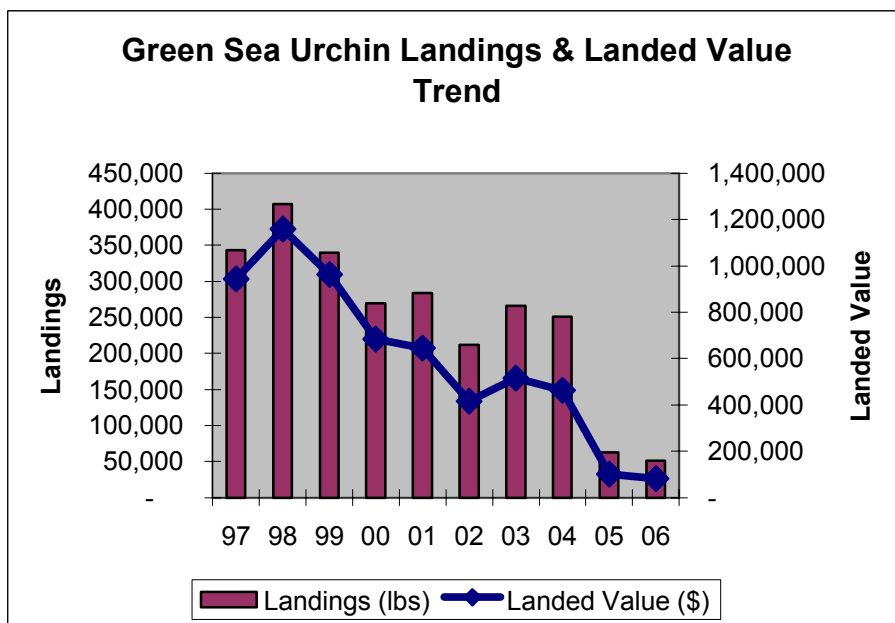
Vessel Type		Classic Style			Modern Style		Total / Average
		Wood	Aluminum / Fibreglass	Steel	Aluminum / Fibreglass	Steel	
Inside Waters / Smaller Vessel	Est # Vessels	1	6	-	10	-	17
	Unit Value	10,000	10,000	-	75,000	-	48,235
	Aggregate Val.	10,000	60,000	-	750,000	-	820,000
Outside Waters / Larger Vessel	Est # Vessels	-	-	-	2	-	2
	Unit Value	-	-	-	125,000	-	125,000
	Aggregate Val.	-	-	-	250,000	-	250,000
Total / Average	Est # Vessels	1	6	-	12	-	19
	Average Value	10,000	10,000	-	83,333	-	56,316
	Aggregate Val.	10,000	60,000	-	1,000,000	-	1,070,000

Valuation Trends



- A dramatic downward trend in licence and lease values (above) is related to plummeting prices and marketability for BC product in Japan. Because of weak prices, participation is only partial and the volume and value of landings has dropped sharply (below). Only a small portion of the green urchin TAC is currently being utilized.

Landings & Landed Value Trends



Avg Landings per Licence (lbs, 2006)	1,040
Avg Landed Value/Licence (2006):	\$1,651

Outlook

- Only 12.8% of the TAC was harvested last season. The balance was left in the water because fishing/processing operations were un-economic.
- A glut of product imported by Japan from the Russian “IUU” fishery (illegal, un-regulated, un-reported) remains the largest challenge to the BC industry.
- The urchin industry held a “Sea Urchin Summit” in February, 2007, bringing harvesters, processors, DFO managers, and DFO “international trade” representatives to explore means of dealing with the Russian IUU situation while providing temporary cost relief to urchin harvesters.
- It is uncertain how/when/if the current market flux will be resolved.
- Urchin stocks are currently healthy and the fishery is considered well-managed; stakeholders express frustration that, despite demonstrating a high level of resource stewardship, their industry is being undermined by external (illegal) forces.
- Excerpt from the Green Urchin fishery management plan:
Sea otter populations are expanding in BC, and because sea otters are a major predator on green urchins, they are expected to have an impact on the fishery in the future.

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>	240 (174 Outside, 66 Inside)
<i>No. of Commercial Communal Lic's (not valued in this study)</i>	22 (FZN designation – 17 Outside, 5 Inside)
<i>Licensing/Management Framework</i>	<p>Second year of a three-year pilot IVQ program in ZN fisheries. Hook & line vessels now have option of using trap gear. Outside licences have 2 options: 1) participate in the directed fishery or 2) reallocate rockfish quota to other groundfish sectors. Each licence receives an equal share of ZN rockfish allocation.</p>
<i>Valuation Criteria (Stratification)</i>	<p>Inside and Outside licences are valued separately: valuations are reported per-foot, though increasingly, transactions are on a per-licence basis. Vessels are stratified by size, construction material, and capability.</p>
<i>Additional Information</i>	<p>The inside fishery is severely constrained due to inshore rockfish conservation measures. 100 % electronic monitoring.</p>

Valuations Performed

Valuations	Purchase and Sale			Lease		
	Valuation Conducted?	Sample Size	Confidence Level	Valuation Conducted?	Sample Size	Confidence Level
Licence	Yes	5-10	Med	Yes	5-10	Low-Med
Quota	n.a.			n.a.		
Vessel	Yes	<3	Low	n.a.		

Current Valuation

Licence Value at March 31, 2007

<i>Licence Category</i>	<i>Value per Foot</i>	<i>Est # Feet</i>	<i>Total Value, All Licences (\$)</i>	<i>Annual Lease Rate (\$)</i>
Rockfish (ZN) Licence Outside	\$ 4,000	7,308	29,232,000	8,000
Rockfish (ZN) Licence Inside	\$ 1,300	2,310	3,003,000	2,500
Rockfish (ZN) Licence Combined	\$ 3,352	9,618	32,235,000	

Valuation Considerations

- Outside licence transactions range from \$3,500 to \$5,000 per foot (\$140,000 to \$175,000 per licence).
- Outside leases range from \$6,000 to \$11,000 per licence.
- Inside licences range from \$1,100 to \$1,600 per foot (\$35,000 to \$60,000 per licence).
- Inside leases range from \$2,000 to \$3,500 per licence.
- Outside vessel length 42', average value \$168,000. Inside vessel length assumed to be 35', average value \$45,500.
- Additionally, there may be separate leases of individual rockfish categories (for example, yelloweye @ \$1.50/lb, silvergrey and roughey @ 25 cents/lb).

Valuation Comments

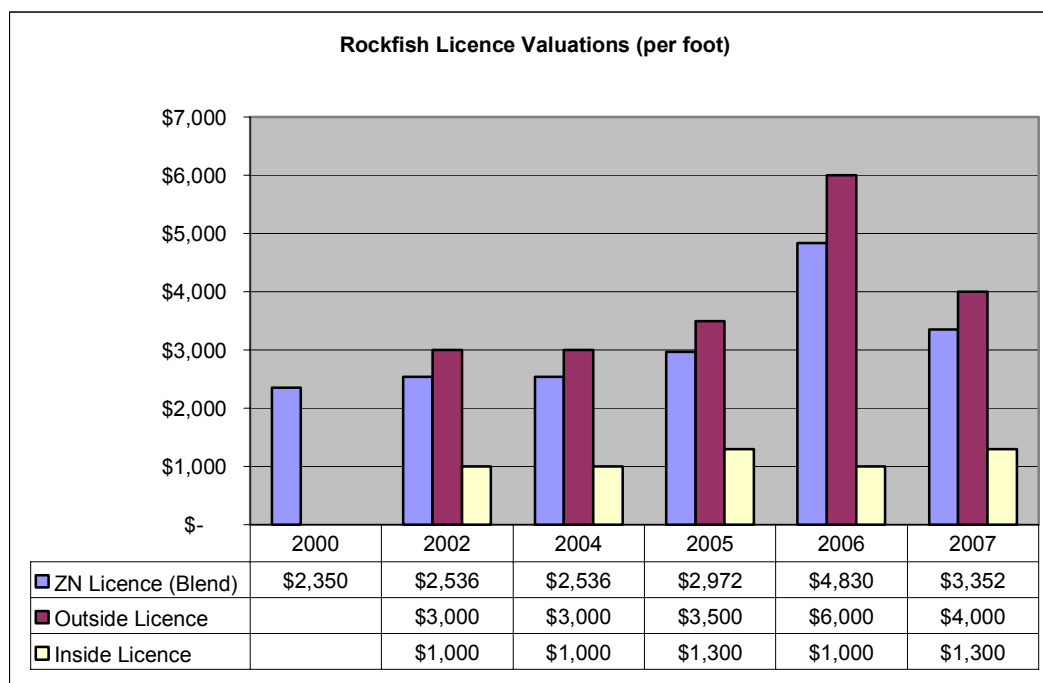
- ATP quite active, with 6 licences purchased during the year. Five of these licences were purchased at the high values prevailing in the summer of 2006, while the sixth was purchased in the spring of 2007 at a price in line with this years' valuation.
- The escalation in outside ZN licence values leading up to 2006 was largely a result of concern (speculation) from halibut and sablefish fishermen that they would require ZN rockfish to satisfy their bycatch requirements. The last couple of seasons have shown that access to rockfish is not as problematic as had been feared. Thus, ZN licence prices have eased.
- There was concern within the ZN fleet that the directed hook & line rockfish fishery would disappear, and that ZN licences would merely become a source of rockfish bycatch for the other groundfish fleets. This has not transpired, in fact, the hook & line fleet is accessing rockfish from other sectors (eg. trawl) that cannot fully utilize all of their rockfish quotas.

Vessel Value

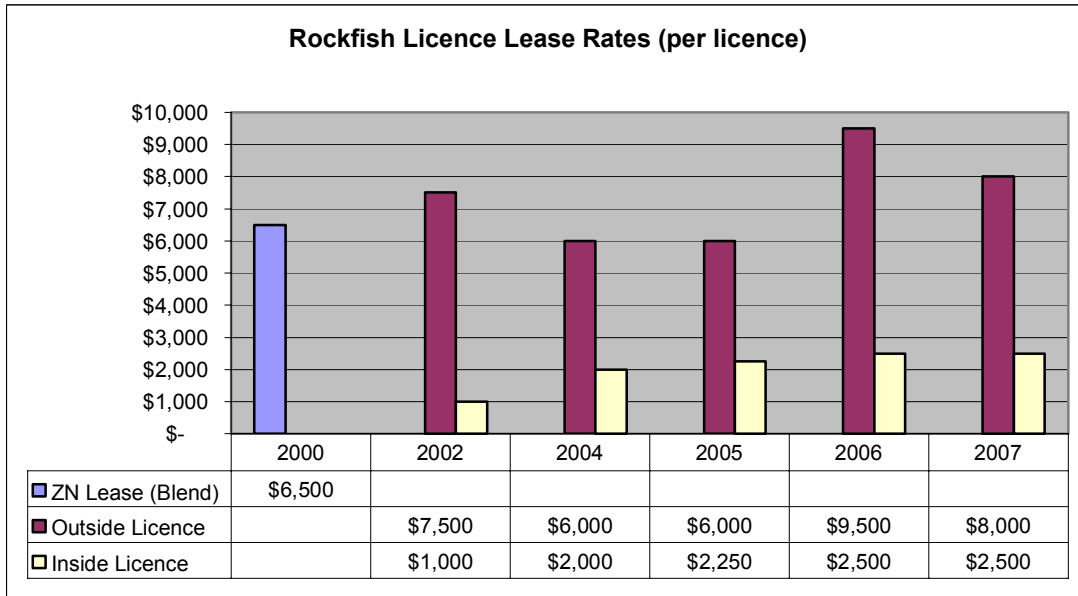
Vessel counts exclude F licences and are best-estimates.

Vessel Type		Classic Style			Modern Style		Total / Average
		Wood	Aluminum / Fibreglass	Steel	Aluminum / Fibreglass	Steel	
Inside Waters / Smaller Vessel	Est # Vessels	30	36	1	26	-	93
	Unit Value	15,000	50,000	65,000	100,000	125,000	52,849
	Aggregate Val.	450,000	1,800,000	65,000	2,600,000	-	4,915,000
Outside Waters / Larger Vessel	Est # Vessels	55	48	9	24	11	147
	Unit Value	35,000	80,000	100,000	200,000	300,000	100,442
	Aggregate Val.	1,925,000	3,840,000	900,000	4,800,000	3,300,000	14,765,000
Total / Average	Est # Vessels	85	84	10	50	11	240
	Average Value	27,941	67,143	96,500	148,000	300,000	82,000
	Aggregate Val.	2,375,000	5,640,000	965,000	7,400,000	3,300,000	19,680,000

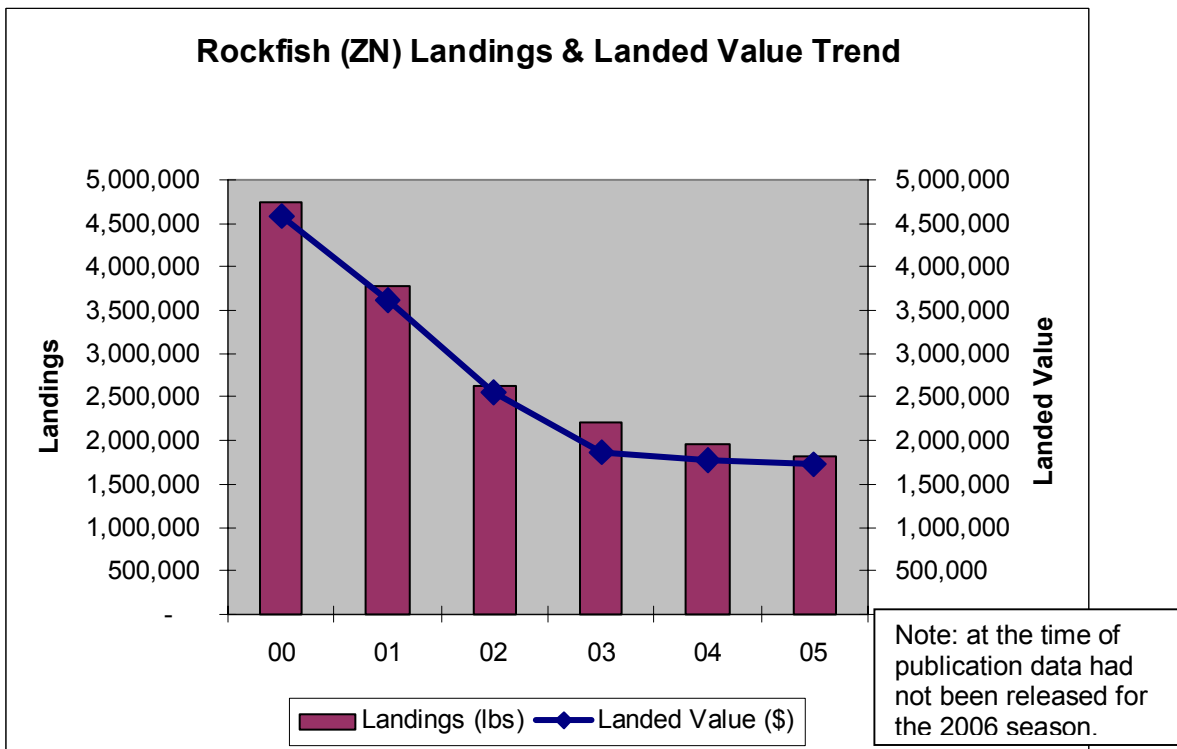
Valuation Trends



- Rapid appreciation in recent years was largely attributable to speculative buying by owners of other groundfish licences for the purpose of securing access to rockfish bycatch.



Landings & Landed Value Trends



<i>Avg Landings per Licence (lbs, 2005)</i>	6,914
<i>Avg Landed Value/Licence (2005):</i>	\$ 6,596

Outlook

- The ZN fishery, along with the other groundfish sectors (trawl, halibut, sablefish, dogfish, lingcod), is in the 2nd year of a 3 year integrated fishing pilot program.
- While there is concern about the complexity of the new program and also the cost (eg. 100 electronic monitoring), the sectors are cooperating well to accommodate emerging issues.
- The pilot integrated program brings both challenges and opportunities for the groundfish fleets.
- While there was some fear that the hook and line rockfish fleet would disappear under integrated fishing, these fears do not appear to have been realized.
- Industry is now working on a “permanent” plan to take effect once the pilot program has lapsed.

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>	511
<i>No. of Commercial Communal Lic's (not valued in this study)</i>	8 (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>Valuation Criteria (Stratification)</i>	Licences are valued on a per-foot basis. Vessels are stratified by size, construction material, and capability
<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 pilot groundfish integration program.

Valuations Performed

Valuations	Purchase and Sale			Lease		
	<i>Valuation Conducted?</i>	<i>Sample Size</i>	<i>Confidence Level</i>	<i>Valuation Conducted?</i>	<i>Sample Size</i>	<i>Confidence Level</i>
Licence	Yes	3-5	Med	n.a.		
Quota	n.a.			n.a.		
Vessel	Yes	<3	Low	n.a.		

Current Valuation

Licence Value at March 31, 2007

Licence Category	Value per Foot	Est # Feet	Total Value, All Licences (\$)
Schedule II (C)Licence	\$ 300	17,374	5,212,200

Valuation Considerations

- C licences that participated in dogfish and lingcod received IVQ allocations under the pilot integrated groundfish program. As quota is effectively “separable” from the licence, licence values have actually lessened.
- C licence transactions range from \$200 to \$400 per foot.
- Average vessel length estimated at 34’, average licence value \$10,200

Valuation Comments

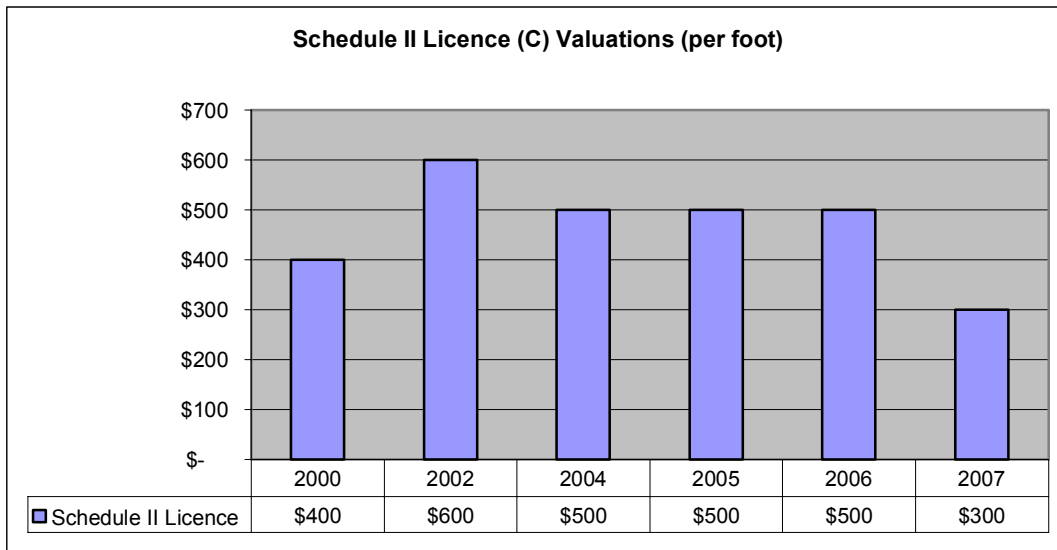
- There is significant activity in this category.
- Although dogfish and lingcod quotas cannot technically be permanently transferred, they are nevertheless being sold (trust agreements).
- Transactions are reported for lingcod quota in the \$6-8 range; dogfish transactions @ 10 cents/lb.
- Dogfish and lingcod quotas are also being leased (25 cents for lingcod, 1 cent for dogfish).

Vessel Value

Vessel counts exclude F licences and are best-estimates.

Vessel Type		Classic Style			Modern Style		Total / Average
		Wood	Aluminum / Fibreglass	Steel	Aluminum / Fibreglass	Steel	
Inside Waters / Smaller Vessel	Est # Vessels	111	222	-	91	2	426
	Unit Value	15,000	50,000	-	100,000	125,000	51,913
	Aggregate Val.	1,665,000	11,100,000	-	9,100,000	250,000	22,115,000
Outside Waters / Larger Vessel	Est # Vessels	33	21	6	22	3	85
	Unit Value	35,000	80,000	100,000	300,000	400,000	132,176
	Aggregate Val.	1,155,000	1,680,000	600,000	6,600,000	1,200,000	11,235,000
Total / Average	Est # Vessels	144	243	6	113	5	511
	Average Value	19,583	52,593	100,000	138,938	290,000	65,264
	Aggregate Val.	2,820,000	12,780,000	600,000	15,700,000	1,450,000	33,350,000

Valuation Trends



Landings & Landed Value Trends

- No data available

Outlook

- C licences remain a vehicle for accessing Schedule II privileges.
- There is a large enough pool of licences that values remain modest.

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 Commercial Communal 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>Valuation Criteria (Stratification)</i>	Licences are valued on a per-licence basis. Vessels are stratified by size, construction material, and capability.
<i>Additional Information</i>	Fishery primarily in mainland inlets of Georgia Strait

Valuations Performed

Valuations	Purchase and Sale			Lease		
	<i>Valuation Conducted?</i>	<i>Sample Size</i>	<i>Confidence Level</i>	<i>Valuation Conducted?</i>	<i>Sample Size</i>	<i>Confidence Level</i>
Licence	Yes	Nil	Low	No		
Quota	n.a.			n.a.		
Vessel	Yes	<3	Low	n.a.		

Current Valuation

Licence Value at March 31, 2007

<i>Licence Category</i>	<i>Value per Licence</i>	<i># Licences</i>	<i>Total Value, All Licences (\$)</i>
Euphausiid (ZF) Licence	\$ 50,000	18	900,000

Valuation Considerations & Comments

- Estimated value based on industry discussions. No transactions. Weak market. No change from the prior year.
- Estimates of value range from \$40,000 to \$70,000.

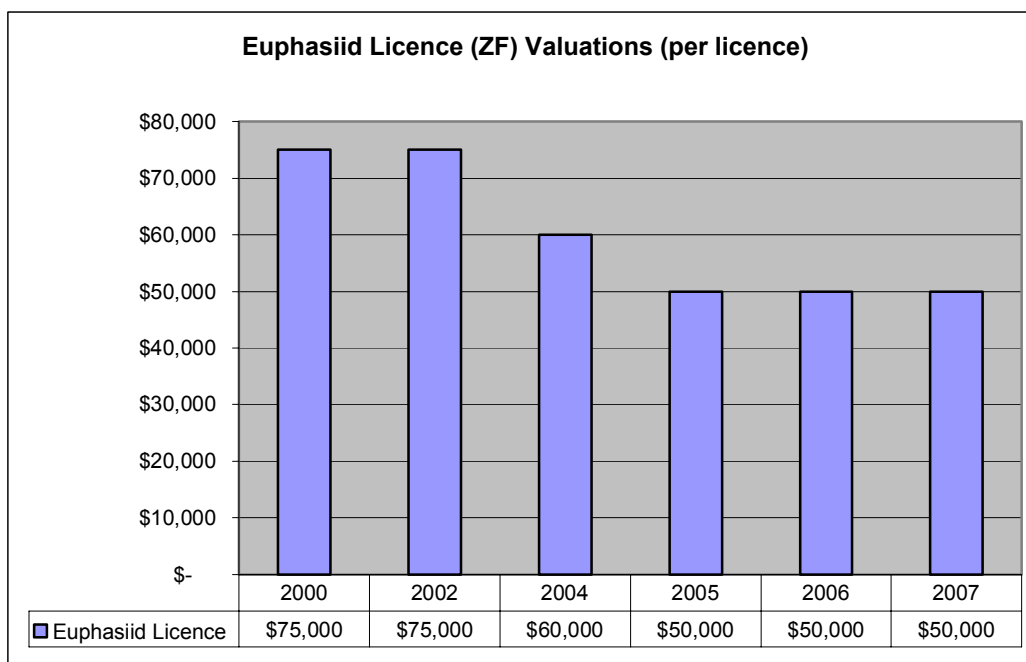
- An offer at \$125,000 elicited no response.
- This is a difficult fishery to profitably execute.

Vessel Value

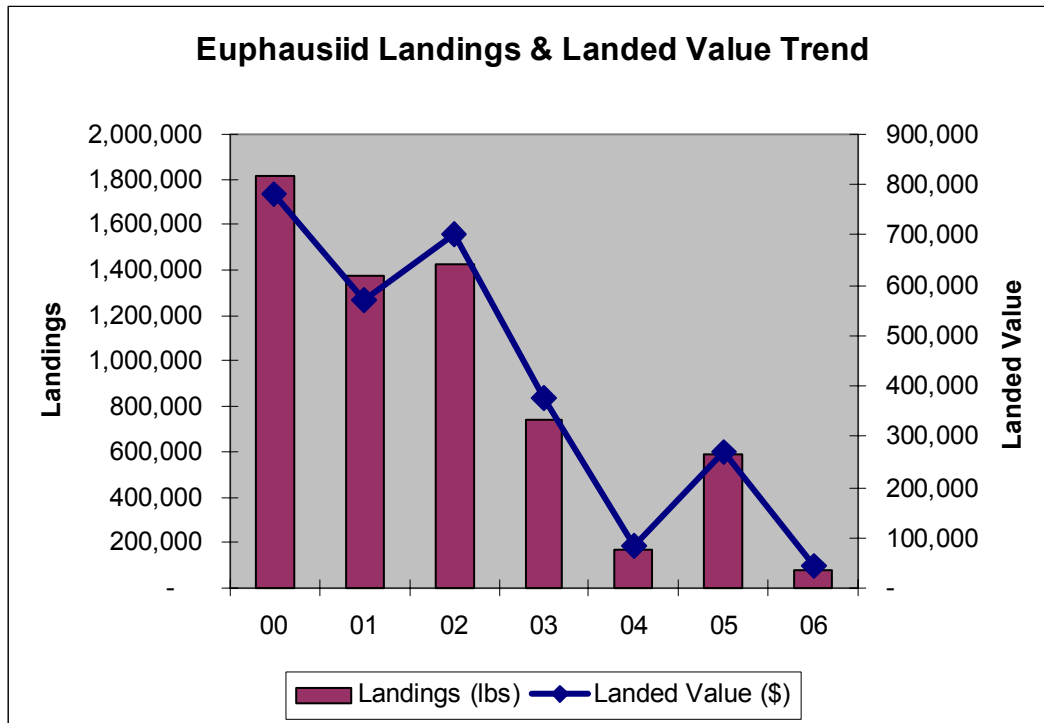
Vessel counts exclude F licences and are best-estimates.

Vessel Type		Classic Style			Modern Style		Total / Average
		Wood	Aluminum / Fibreglass	Steel	Aluminum / Fibreglass	Steel	
Inside Waters / Smaller Vessel	Est # Vessels	-	-	1	3	-	4
	Unit Value	-	-	150,000	300,000	-	262,500
	Aggregate Val.	-	-	150,000	900,000	-	1,050,000
Outside Waters / Larger Vessel	Est # Vessels	3	4	1	4	2	14
	Unit Value	65,000	175,000	200,000	400,000	500,000	263,929
	Aggregate Val.	195,000	700,000	200,000	1,600,000	1,000,000	3,695,000
Total / Average	Est # Vessels	3	4	2	7	2	18
	Average Value	65,000	175,000	175,000	357,143	500,000	263,611
	Aggregate Val.	195,000	700,000	350,000	2,500,000	1,000,000	4,745,000

Valuation Trends



Landings & Landed Value Trends



<i>Avg Landings per Licence (lbs, 2006)</i>	4627
<i>Avg Landed Value/Licence (2006):</i>	\$2,418

- Data appears incomplete for recent years.

Outlook

- Euphausiid industry having trouble increasing values in part because of competitive nature of fishery (sub-optimal handling practices) and in part because low quotas pre-empt meaningful market development
- This fishery has difficulty attaining higher quotas because of the perception of some that plankton fisheries are destructive to the food chain.

SUMMARY

Licence Valuation Totals

Fishery	Licence Designation	# of Licences	Total Value (\$)	Average Value (\$)
Salmon – Seine	AS	246	77,910,000	316,707
	FAS	30	-	
Salmon – Gillnet	AG	1042	75,690,000	72,639
	FAG	110	-	
	N	254	-	
Salmon – Troll	AT	516	69,200,000	134,109
	FAT	22	-	
Roe Herring – Seine	HS	248	36,160,000	145,806
	FHS	4	-	
Roe Herring – Gillnet	HG	1239	40,125,000	32,385
	FH	27	-	
Herring – Spawn on Kelp	J	36	13,500,000	375,000
	FJ	2	-	
	Other F	7		
Halibut	L	402	23,975,280	59,640
	FL	34		
Sablefish	K	46	11,500,000	250,000
	FK	2		
Geoduck / Horseclam	G	55	137,500,000	2,500,000
Shrimp (Trawl)	S	234	10,553,400	45,100
	FS	11	-	
Prawn (Trap)	W	245	152,022,500	620,500
	FW	7	-	
Groundfish Trawl	T	141	11,547,900	81,900
	FT	1	-	-
Crab	R	206	92,288,000	448,000
	FR	16	-	-
Sea Cucumber	ZD	85	14,875,000	175,000
Red Sea Urchin	ZC	99	7,425,000	75,000
	FZC	11	-	
Green Sea Urchin	ZA	49	980,000	20,000
Rockfish Hook & Line	ZN - Outside	174	29,232,000	168,000
	ZN - Inside	66	3,003,000	45,500
	FZN - Outside	17		

Fishery	Licence Designation	# of Licences	Total Value (\$)	Average Value (\$)
		FZN - Inside	5	-
Schedule II	C	511	5,212,200	10,200
	FC	8	-	
Euphausiid	ZF	18	900,000	50,000
	FZF	1	-	
Total Pacific Licenses			813,599,280	

Quota Valuation Totals

Fishery	Quota Type	Price per lb. (\$)	Approx. # of lbs.	Total Value \$ millions
Halibut	Halibut	33.00	10,089,400	332,950,200
Sablefish	Sablefish	32.00	4,402,939	140,894,048
Groundfish Trawl	Groundfish	1.85	88,713,104	164,119,242
Groundfish Trawl	Hake - Offshore	0.60	187,391,000	112,434,600
Groundfish Trawl	Hake - Gulf	0.10	22,046,000	2,204,600
Groundfish Trawl	Arrowtooth (turbot)	0.40	33,069,000	13,227,600
Quota Total				765,830,290

Grand Total Value Licences and Quota: \$1,579,429,570

Individual Vessel Valuation Summary

The following table shows valuation by stratification for vessel value estimations provided in the report. A fleet total value cannot be calculated using the present valuation methodology, since many vessels are involved in multiple fisheries. The total fleet size is approximately 3200 vessels.

2004 Current Valuation	Inside Wood	Outside Wood	Inside Alum Classic	Outside Alum Classic	Inside Steel Classic	Outside Steel Classic	Inside Alum Modern	Outside Alum Modern	Inside Steel Modern	Outside Steel Modern
Salmon Seine	25,000	65,000	125,000	175,000	150,000	200,000	300,000	400,000	325,000	500,000
Salmon Gillnet	15,000	35,000	25,000	50,000	40,000	75,000	75,000	150,000	100,000	175,000
Salmon Troll	15,000	35,000	25,000	50,000	40,000	75,000	75,000	150,000	100,000	175,000
Roe Herring SN	25,000	65,000	125,000	175,000	150,000	200,000	300,000	400,000	325,000	500,000
Roe Herring GN	-	-	10,000	25,000	-	-	45,000	65,000	-	-
Halibut	15,000	35,000	50,000	80,000	65,000	100,000	100,000	300,000	125,000	400,000
Sablefish	25,000	65,000	125,000	175,000	150,000	200,000	300,000	400,000	325,000	500,000
Geoduck	10,000	15,000	10,000	40,000	25,000	50,000	75,000	125,000	100,000	150,000
Shrimp	15,000	35,000	25,000	50,000	40,000	125,000	75,000	300,000	100,000	400,000
Prawn	15,000	35,000	50,000	80,000	65,000	100,000	100,000	300,000	125,000	400,000
Groundfish	15,000	65,000	60,000	175,000	65,000	300,000	200,000	400,000	300,000	600,000
Crab	15,000	35,000	50,000	80,000	65,000	100,000	100,000	300,000	125,000	400,000
Sea Cucumber	10,000	15,000	10,000	40,000	25,000	50,000	75,000	125,000	100,000	150,000
Red Urchins	10,000	15,000	10,000	40,000	25,000	50,000	75,000	125,000	100,000	150,000
Green Urchins	10,000	15,000	10,000	40,000	25,000	50,000	75,000	125,000	100,000	150,000
ZN	15,000	35,000	50,000	80,000	65,000	100,000	100,000	200,000	125,000	300,000
Sched II	15,000	35,000	50,000	80,000	65,000	100,000	100,000	300,000	125,000	400,000
Euphasiid	25,000	65,000	125,000	175,000	150,000	200,000	300,000	400,000	325,000	500,000