



Canadian Aquaculture Industry



2003-2004

KEY FIGURES



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INTRODUCTION

Seafood is the largest single food commodity exported by Canada. Canada is the fifth largest seafood exporter in the world. In 2003, wild harvest and aquaculture production totalled over CAN\$ 2.9 billion.

Aquaculture is a relatively new commercial activity in Canada and in many other parts of the world, but already it occupies a significant position in the seafood production sector. Cultured fish and seafood production was valued at CAN\$ 586 million in 2003, comprising approximately one fifth of all Canadian fisheries and aquaculture production.

In this fact book, you will find the latest figures featuring a sampling of economic indicators of the Canadian aquaculture industry.

Aquaculture Production and Value 2003

	Production (tonnes)	Value (CAN\$ thousand)
Salmon ¹	105,050	434,170
Trout ¹	5,661	26,479
Steelhead ¹	1,150	6,324
Other ²	7,343	45,378
Total fish	119,204	512,351
Clams	1,500	7,600
Oysters	12,784	18,370
Mussels	20,510	30,681
Scallops	145	835
Other	582	6,082
Total Shellfish	35,521	63,568
Total	154,725	575,919
Re-stocking ³	909	9,625
Total	155,634	585,544

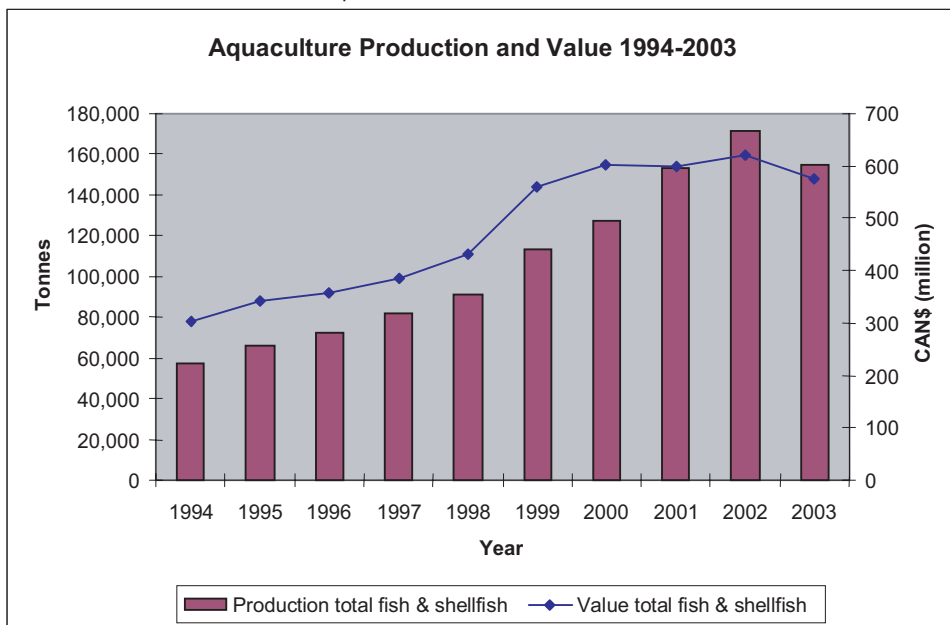
Source: Statistics Canada

1) Excludes confidential data.

2) Includes char, other finfish and total PEI, Saskatchewan and Alberta finfish.

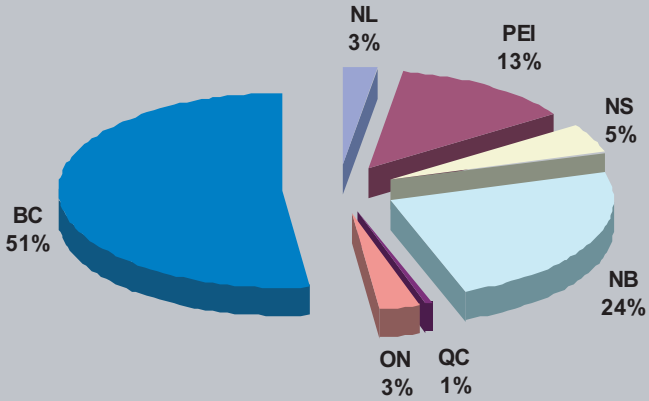
3) To outfitters for stocking lakes for sport fishing.

The production and value of Aquaculture include the amount and value produced on sites and excludes hatcheries or value added products.



Source: Statistics Canada

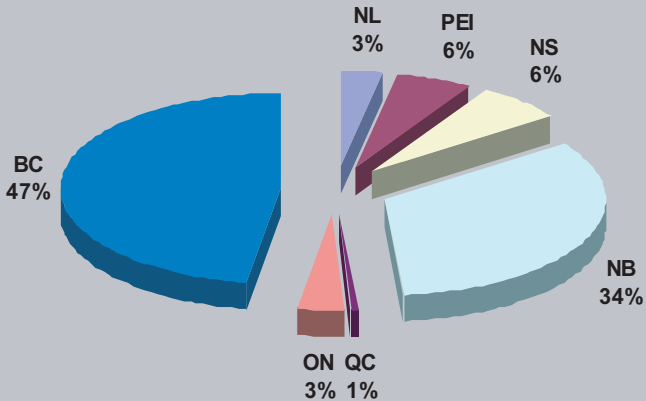
Share of Aquaculture Production by Province 2003



Source: Statistics Canada

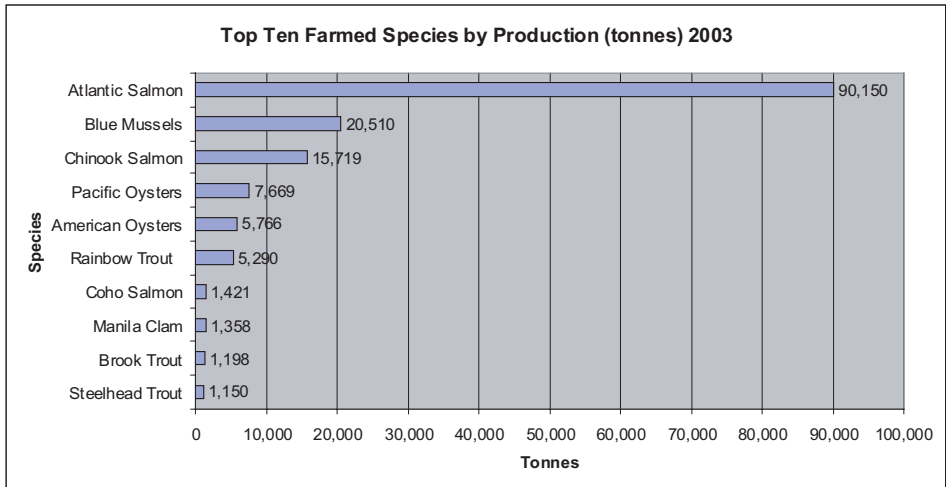
1) See acronyms for Provinces and Territories on last page.

Share of Aquaculture Value by Province 2003

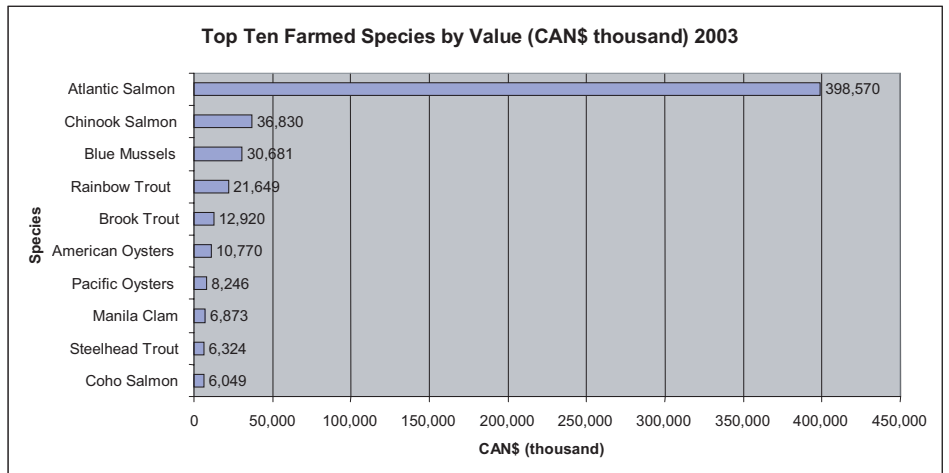


Source: Statistics Canada

TOP TEN FARMED SPECIES



Source: Statistics Canada, BCMAFF, MAPAQ, NSDAF, University of Guelph



Source: Statistics Canada, BCMAFF, MAPAQ, NSDAF, University of Guelph

Aquaculture Gross Value Added 2003

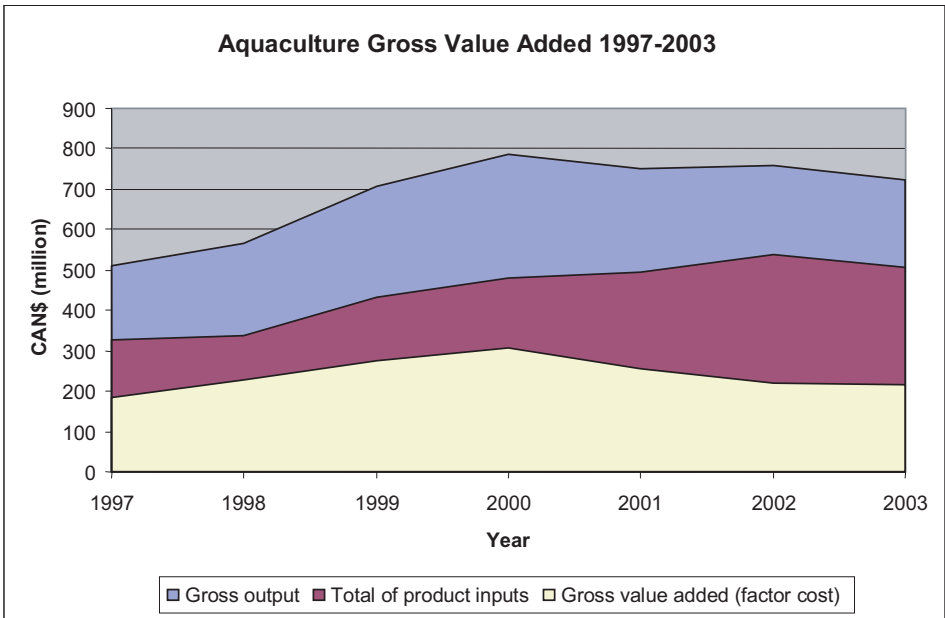
A. Sources of output	CAN\$ (million)	
Sales of aqua products/services		715
Whole fish dressed, fresh or chilled	351	
Fish eggs & live fish for grow-out	33	
Whole fish live (excluding for grow-out)	36	
Whole fish dressed & frozen	11	
Fish fillets, fresh or frozen	182	
Fish, dried, smoked or in brine	0	
Total finfish ¹	644	
Total molluscs	67	
Other goods & services	4	
Subsidies		1
Other operating revenue		15
Total operating revenue		731
Change in inventory value - goods		-9
Gross output		723
B. Product inputs		
Product expenses		511
Feed	233	
Therapeutants	8	
Purchases, eggs/fish - grow-out	44	
Purchases, fish - processing/resale	70	
Insurance premiums	11	
Energy (electricity, fuel, etc.)	11	
Goods transportation & storage	23	
Processing services	49	
Rental & leasing expenses	5	
Maintenance/repairs, buildings	4	
Maintenance/repairs, machinery	13	
Professional services	9	
Other operating expenses	31	
Change in inventory value - raw materials		-4
Total of product inputs		507
C. Gross value added (factor cost)		216
D. Selected primary inputs		
Salaries & wages	102	
Employer portion of employee benefits	10	
Depreciation	39	
Interest paid	22	

Source: Statistics Canada

1) Contains confidential data.

Definition: The gross value added by the industry to the economy is the difference between gross output and total of product inputs. Complete description of concepts and methods are contained in the publication Aquaculture Statistics 2003, Statistics Canada - Catalogue number 23-222-XIE.

Aquaculture Gross Value Added 1997-2003



Source: Statistics Canada

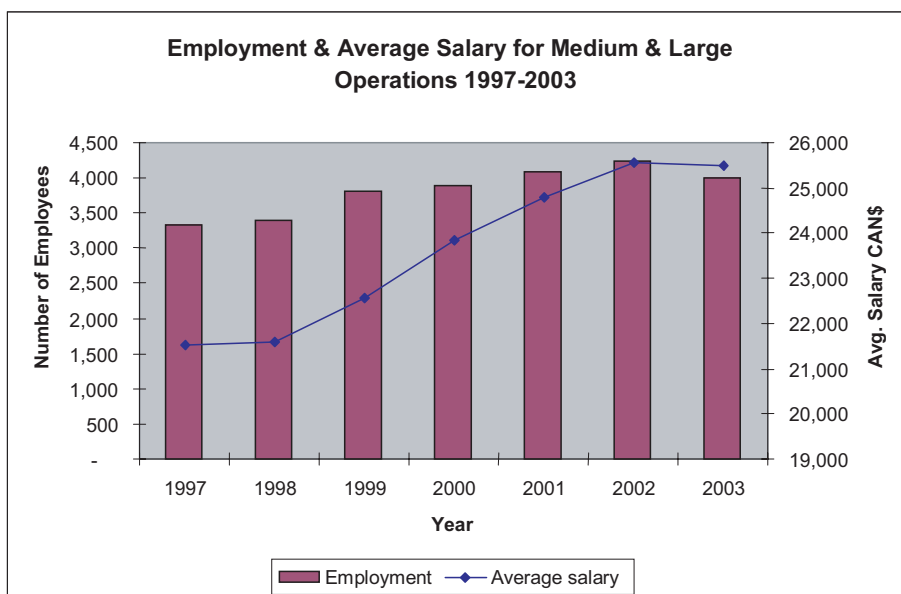
Employment & Average Salary for Medium & Large Operations¹ 2003

	Employment #	Average salary CAN\$	Total salary CAN\$	Revenue size cut-offs CAN\$
NL	210	14,286	3,000,000	46,000
PE	620	18,065	11,200,000	46,000
NS	275	22,545	6,200,000	70,000
NB	1,260	26,190	33,000,000	250,000
QC	190	16,842	3,200,000	46,000
ON	190	22,105	4,200,000	46,000
BC	1,250	32,800	41,000,000	250,000
Canada	3,995	25,482	101,800,000	

Source: Statistics Canada

1) Medium and large operations are greater than the minimum cut-off for each province, that cut-off ranging from gross business revenues of \$30 000 to \$500 000 depending on the province. Taxation data is used for operations smaller than this minimum so no employment data can be derived for small operations.

Data are experimental, subject to revision and should be used with caution. These data include full-time, part-time and temporary employees but exclude self-employed workers and the Prairie Provinces.

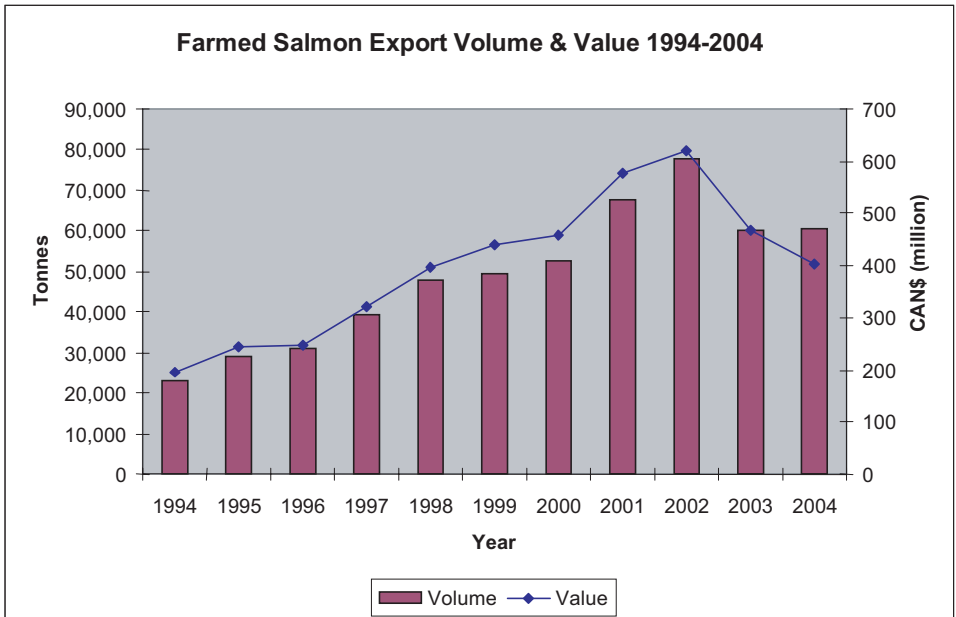


SALMON AND MUSSEL EXPORTS

Farmed Salmon Exports 2004

	Atlantic salmon fresh, whole, dressed	Chinook fresh, whole, dressed	Coho fresh, whole, dressed	Atlantic salmon frozen, whole, dressed	Atlantic salmon fresh fillets	Total
Volume (tonnes)						
United States	42,935	4,129	159	59	9,335	56,617
France	0	6	4	0	18	28
Japan	902	232	0	284	245	1,663
Taiwan	1,619	2	0	0	0	1,621
Other	484	80	0	133	0	697
Total Volume	45,940	4,449	163	476	9,598	60,626
Value (CAN\$ thousand)						
United States	262,197	23,572	988	348	94,575	381,680
France	0	68	28	0	116	212
Japan	5,107	1,349	0	2,451	1,392	10,299
Taiwan	8,819	10	0	0	2	8,831
Other	2,377	346	0	321	0	3,044
Total Value	278,500	25,345	1,016	3,120	96,085	404,066

Source: Statistics Canada

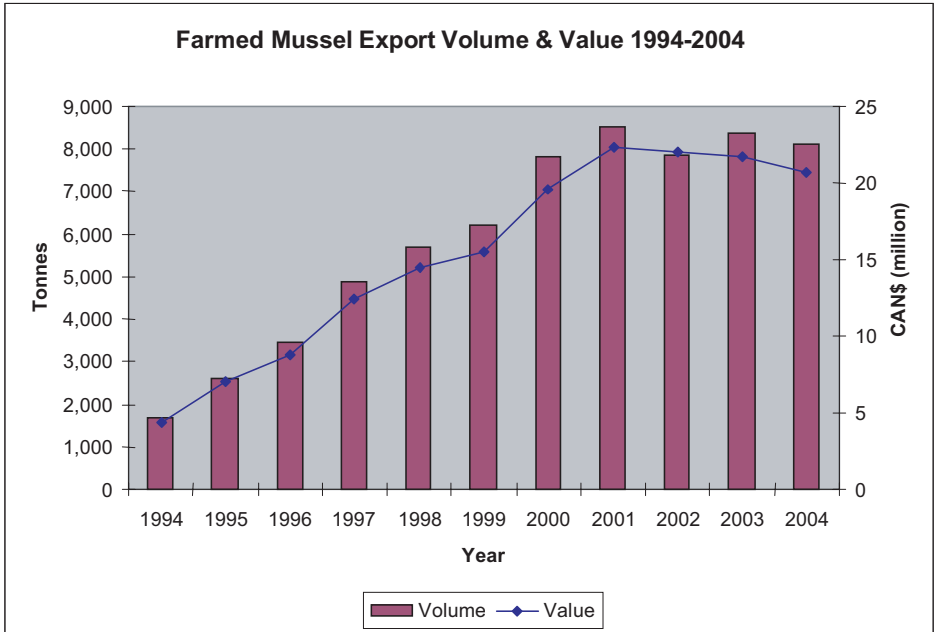


Includes Atlantic salmon, Coho and Chinook. For years 1998 - 2000 data originate from the United States Bureau of Commerce. Totals include data for United States only; data for other countries not available. For years 2001 onward data originate from International Trade Division, Statistics Canada.

Farmed Mussel Exports 2004

	Volume (tonnes)
United States	8,081
Other	23
Total Volume	8,104
	Value (CAN\$ thousand)
United States	20,667
Other	80
Total Value	20,747

Source: Statistics Canada



Source: Statistics Canada

Aquaculture Licences¹ 2004

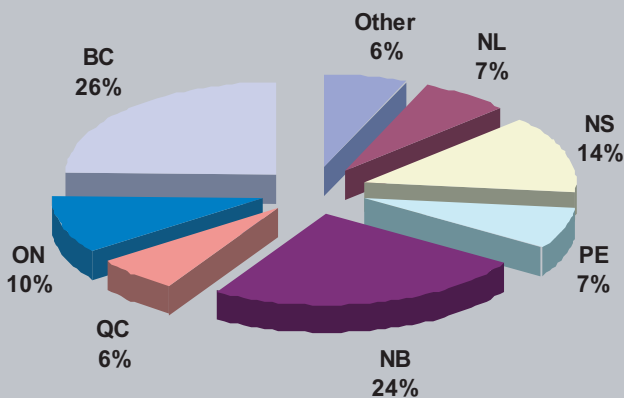
	NL	NS	PE	NB	QC	ON	MB ²	SK	AB	BC	YU ³	CAN
Commercial / Developmental	190	384	213	694	184	290	44	16	84	704	39	2,842
Marine Finfish	89	55	0	97	0	0	0	0	0	132	0	373
Marine Shellfish	84	327	213	485	41	0	0	0	0	477	0	1,627
Marine Plants	0	0	0	1	0	0	0	0	0	5	0	6
Marine Sea Urchins	0	2	0	0	6	0	0	0	0	0	0	8
Marine Lobster Pounds	0	0	0	6	0	0	0	0	0	0	0	6
Total Marine	173	384	213	589	47	0	0	0	0	614	0	2,020
Freshwater Finfish	17	0	0	105	137	290	44	16	84	90	39	822
Total Finfish	106	55	0	202	137	290	44	16	84	222	39	1,195
Recreational / Private	0	0	0	106	0	0	0	n/av	3,624 ⁴	0	0	3,730
Institutional / Research	16	0	0	10	0	0	0	0	n/av	0	0	26
Total	206	384	213	810	184	290	44	16	3,708	704	39	6,598

Sources: NSDAF; MAPAQ; OMNR; BCMAFF; DFO - PEI; MWSFB; YDE; SDAFRR; SKDOE; AAFRD; NBDAFA; NLDFA

- 1) Aquaculture licence = permit to operate an aquaculture operation.
 - 2) Data provided is for the year 2003. Number of licensed operators is 25; 44 licences issued for sites / water bodies.
 - 3) Data provided is for year 2002.
 - 4) Includes farm dugouts and ponds.
- n/av - not available.

Total Finfish = Marine Finfish + Freshwater Finfish
 Commercial / Developmental = Total Marine + Freshwater Finfish
 Total = Commercial / Developmental + Recreational/Private + Institutional/Research

Percentage of Commercial / Developmental Licences by Province



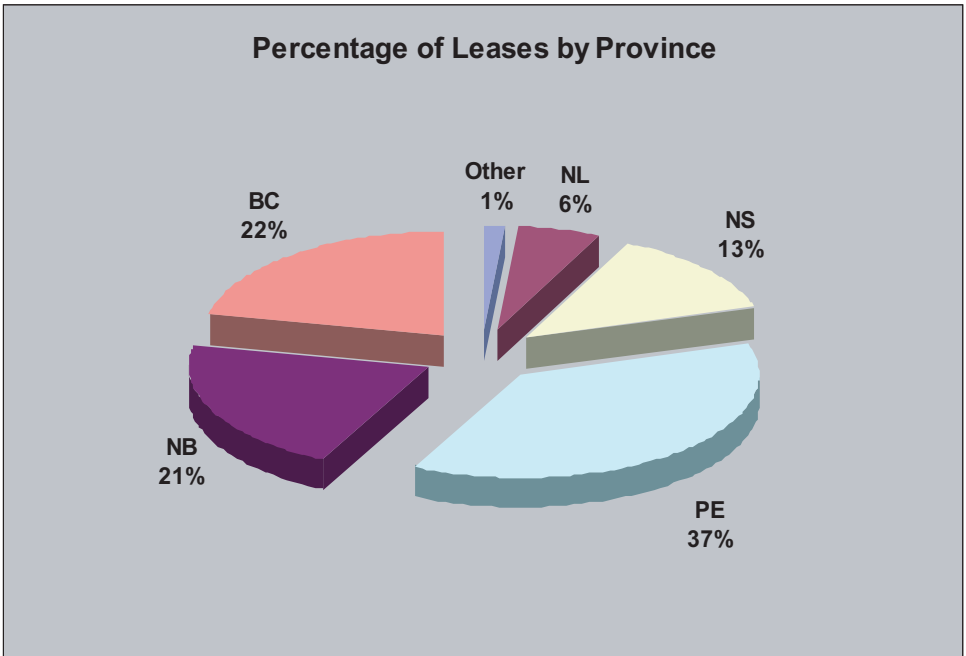
Sources: NSDAF; MAPAQ; OMNR; BCMAFF; DFO - PEI; MWSFB; YDE; SDAFRR; SKDOE; AAFRD; NBDAFA; NLDFA

Aquaculture Leases¹ 2004

	NL	NS	PE	NB	QC	ON	MB ²	SK	AB	BC	YU ³	CAN
Marine Finfish	61	55	0	99	0	0	0	0	0	129	0	344
Marine Shellfish	80	327	1,073	484	23	0	0	0	0	475	0	2,462
Marine Plants	1	0	0	1	0	0	0	0	0	4	0	6
Marine Sea Urchins	2	2	0	0	6	0	0	0	0	0	0	10
Marine Lobster Pounds	0	0	0	23	0	0	0	0	0	0	0	23
Total Marine	144	384	1,073	607	29	0	0	0	0	608	0	2,845
Freshwater Finfish	17	0	0	4	1	8	0	1	0	17	0	48
Total	161	384	1,073	611	30	8	0	1	0	625	0	2,893

Sources: NSDAF; MAPAQ; OMNR; BCMAFF; DFO - PEI; MWSFB; YDE; SDAFRR; SKDOE; AAFRD; NBDAFA; NLDFA

- 1) Lease = area where aquaculture facility is permitted to operate. Terms other than lease are used to identify property rights, including Land Use Permit and Licence to Occupy.
- 2) Data provided is for the year 2003.
- 3) Data provided is for year 2002.



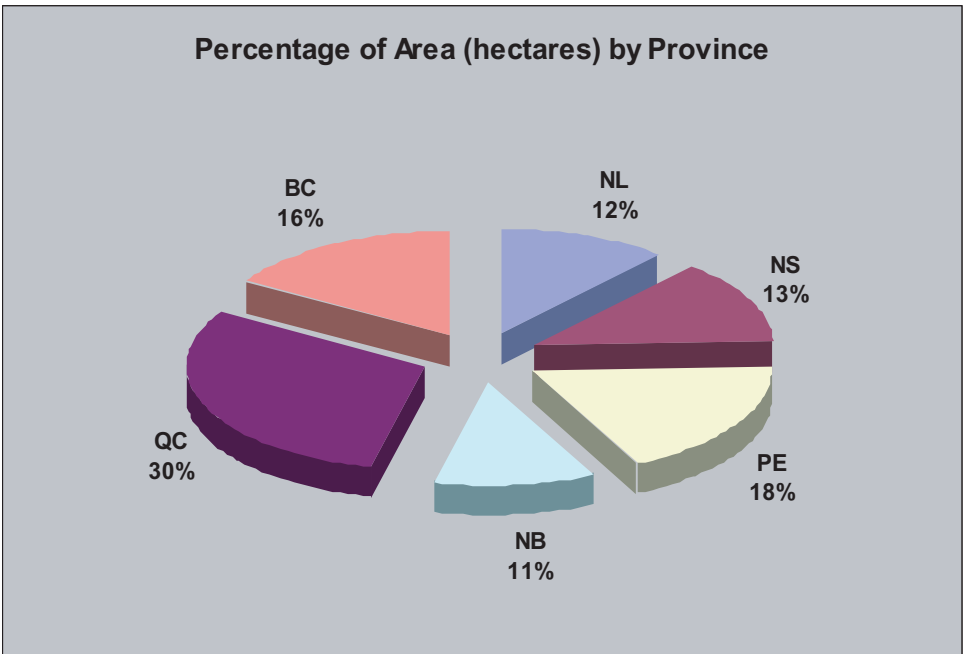
Sources: NSDAF; MAPAQ; OMNR; BCMAFF; DFO - PEI; MWSFB; YDE; SDAFRR; SKDOE; AAFRD; NBDAFA; NLDFA

Aquaculture Area¹ (hectares) 2004

	NL	NS	PE	NB	QC	ON	MB ²	SK	AB	BC	YU ³	CAN
Marine Finfish	745	280	0	1,581	0	0	0	0	0	3,591	0	6,197
Marine Shellfish	3,822	4,945	7,543	2,790	11,835	0	0	0	0	2,990	0	33,925
Marine Plants	1	0	0	4	0	0	0	0	0	4 ⁴	0	9
Marine Sea Urchins	80	3	0	0	359	0	0	0	0	n/ap	0	442
Marine Lobster Pounds	0	0	0	61	0	0	0	0	0	n/ap	0	61
Total Marine	4,648	5,228	7,543	4,436	12,194	0	0	0	0	6,585	0	40,634
Freshwater Finfish	58	0	0	23	2	24	0	80	0	115 ⁵	0	302
Total	4,706	5,228	7,543	4,459	12,196	24	0	80	0	6,700	0	40,936

Sources: NSDAF; MAPAQ; OMNR; BCMAFF; DFO - PEI; MWSFB; YDE; SDAFRR; SKDOE; AAFRD; NBDAFA; NLDFA

- 1) The term "area" refers to crown land area only and represents the total area leased for aquaculture as opposed to the intensively used area.
 - 2) Data provided is for the year 2003.
 - 3) Data provided is for the year 2002.
 - 4) Includes hectares solely for marine plant aquaculture. Other marine plant aquaculture operations are included in finfish and shellfish areas.
 - 5) Includes Crown Land tenure area only. Area of freshwater finfish aquaculture on private land is not available.
- n/ap - not applicable.



Sources: NSDAF; MAPAQ; OMNR; BCMAFF; DFO - PEI; MWSFB; YDE; SDAFRR; SKDOE; AAFRD; NBDAFA; NLDFA

Number of Commercial Aquaculture Hatcheries 2004

	NL	NS	PE	NB	QC	ON	MB ¹	SK	AB	BC	YU ²	CAN
Finfish	5	37	0	21	37	n/av	3	5	15	64	2	189
Shellfish	0	5	0	0	1	0	0	0	0	8	0	14
Total	5	42	0	21	38	0	3	5	15	72	2	203

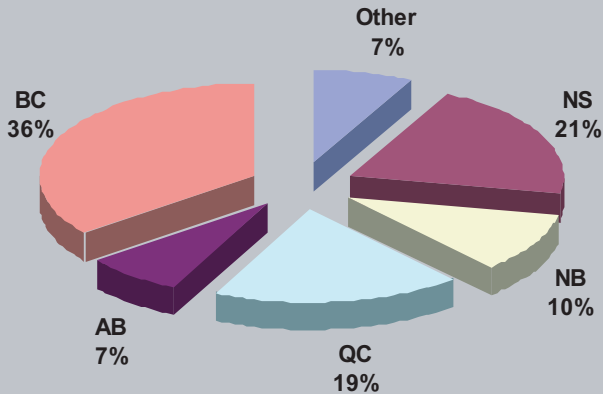
Sources: NSDAF; MAPAQ; OMNR; BCMAFF; DFO - PEI; MWSFB; YDE; SDAFRR; SKDOE; AAFRD; NBDAFA; NLDFA

1) Data provided is for the year 2003.

2) Data provided is for year 2002.

n/av - not available.

Percentage of Commercial Aquaculture Hatcheries by Province



Sources: NSDAF; MAPAQ; OMNR; BCMAFF; DFO - PEI; MWSFB; YDE; SDAFRR; SKDOE; AAFRD; NBDAFA; NLDFA

ACRONYMS FOR PROVINCES AND TERRITORIES

NL	- Newfoundland & Labrador
NS	- Nova Scotia
PE	- Prince Edward Island
NB	- New Brunswick
QC	- Quebec
ON	- Ontario
MB	- Manitoba
SK	- Saskatchewan
AB	- Alberta
BC	- British Columbia
YU	- Yukon Territory

ACRONYMS FOR SOURCES

NSDAF	- Nova Scotia Department of Agriculture and Fisheries
MAPAQ	- Ministère de l'Agriculture, des Pêcheries et de l'Alimentation du Québec
OMNR	- Ontario Ministry of Natural Resources
BCMAFF	- British Columbia Ministry of Agriculture, Food and Fisheries
DFO - PEI	- Department of Fisheries and Oceans, Prince Edward Island
MWSFB	- Manitoba Water Stewardship, Fisheries Branch
YDE	- Yukon Department of Environment
SDAFRR	- Saskatchewan Department of Agriculture, Food and Rural Revitalization
SKDOE	- Saskatchewan Department of Environment
AAFRD	- Alberta Agriculture, Food and Rural Development
NBDAFA	- New Brunswick Department of Agriculture, Fisheries and Aquaculture
NLDFA	- Newfoundland & Labrador Department of Fisheries and Aquaculture

SOURCES CITED

Aquaculture Statistics 2003, Catalogue no. 23-222-XIE, Statistics Canada.
<http://www.statcan.ca/cgi-bin/downpub/freepub.cgi>

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