

North American Commission

NAC(03)5

NAC Scientific Working Group on Salmonid Introductions and Transfers

Report of Activities - 2002 /2003

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Members:

Rex Porter (Canada Co-chair)
Shane O'Neil (Canada)
Gilles Olivier (Canada)

Mary Colligan (USA Co-chair)
Dave Bean (USA)

The Scientific Working Group (SWG) did not formally meet during this reporting period, but rather conducted its business through correspondence. The only task conducted by the Working Group was to up-date its three databases: 1) inventory of introductions and transfers; 2) table on the status of disease occurrences within the NAC Area; and 3) occurrences of farmed salmonids in rivers. The Scientific Working Group is waiting for direction from the NAC, with respect to recommended revisions to the NAC Protocols. It is our understanding that Canada is in the process of reviewing the consistency of the NAC Protocols with the Canadian National Code for Introduction and Transfers of Aquatic Organisms.

1. Update of the databases for the inventory of introductions and transfers of salmonids within the NAC area.

Information for the inventory of introductions and transfers of salmonids for 2001 and 2002 was solicited from federal, state and provincial agencies. To date, we have received information from all of the Canadian agencies, but from the USA, we have only received information on transfers of Atlantic salmon for the State of Maine. No information was received for other species or other States. A summary of the information received for 2001 and 2002 is provided in Table 1; and, a list of the individual introductions and transfers are provided in Appendices 1 and 2. It should be noted that the Canadian transfers are only those transfers that crossed provincial boundaries, whereas the US transfers include both shipments into and within a State. Inventory information for years 1986 to 2000 are in previous reports to the NAC.

Approximately 90% of the introductions and transfers were for aquaculture purposes, in both 2001 and 2002. The remaining 10% were for research and education or for stock enhancement. Several shipments are noteworthy.

In 2001, there were a total of five (5) shipments of all-female triploid Gaspé strain eggs in to New Brunswick and Nova Scotia and one (1) shipment of mixed sex diploid Gaspé strain eggs into Newfoundland for aquaculture purposes. In 2002 there were two (2) shipments of all-female triploid Gaspé strain eggs in to New Brunswick and one (1) shipment of mixed sex diploid Gaspé strain eggs into Newfoundland. The use of mixed sex diploid Gaspé strain in marine of freshwater aquaculture cages has the potential to increase to risk of adverse genetic

effects on wild salmon populations if these fish escape. It is recommended that a thorough risk assessment be conducted prior to releasing these fish into cages.

There was a shipment of transgenic salmon and another of transgenic rainbow trout from Prince Edward Island to Newfoundland for research purposes, in 2002. These fish are being kept in land-based research facilities with no risk of escape.

There was one shipment of 50,000 triploid and 50,000 mixed sex diploid Atlantic salmon eggs of Mowi strain imported from Iceland to Prince Edward Island in 2002. The fish are being kept in quarantine until all of the necessary disease diagnostic work has been completed. They will then be used in growth performance experiments in land-based facilities, in which the risk of escapement is low. No authorization will be given for these fish to be used in freshwater or marine cage rearing.

Reproductively viable European strains and European-North American hybrids are still present at some marine aquaculture sites in Maine, which is contrary to the NAC Protocols. However, progress is being made in phasing out their use. See the Section below titled “Current Status of US Efforts to Protect Wild Salmon”.

Reproductively viable mixed-sexed diploid rainbow trout continues to be used in some marine aquaculture sites in Atlantic Canada, which is contrary to the NAC Protocols. It is believed that the establishment of one or more reproducing populations of rainbow trout on the west coast of Newfoundland is the result of rainbow trout that escaped from marine aquaculture cages.

2. Update of the databases for fish disease occurrences within the NAC area.

The database on the historic occurrences of fish pathogens in the NAC area has been updated with the exception of the States of New York and Rhode Island, and provided in Table 2.

There was a report of the detection of Viral Hemorrhagic Septicemia (VHS) in one specimen of wild Striped Bass in Miramichi Bay. It was identified as “North American” strain and not the “European” or “Salmonid” strain of VHS. There is no concern that this would pose a health risk for Atlantic salmon.

There were no reports of ISA being detected in Maine in 2002. ISA continues to be of concern in New Brunswick. There is a joint federal, Provincial, industry committee overseeing the control and management of the disease. Officials from Canada and the USA are in close communication on the management of this disease.

Whirling disease was reported for the first time, in 2002, from the State of Vermont.

3. Update database of numbers Atlantic salmon aquaculture escapees and observations of rainbow trout in Atlantic salmon rivers.

The SWG compiled the most recent information available to the Group on occurrences of Atlantic salmon and rainbow trout aquaculture escapees in rivers within Maine, New Brunswick, Nova Scotia, and Newfoundland (Table 3, 4, and 5). It is recognized that the information is incomplete, considering the difficulty in identifying escaped-farmed fish, and information is primarily obtained from field investigations on a relatively small number of rivers or from reports from anglers.

In 2002, Atlantic salmon aquaculture escapees were reported in five (5) rivers in New Brunswick and Maine (Table 3). The greatest number (35) were reported in the Magaguadavic River with the escapees representing 83% of the salmon entering the river. Although only small numbers of aquaculture escapees were observed in the St. Croix (5), the Dennys River (4) and the Union River (6), they represent a range of 20% to 67% of the salmon run to these rivers. The total number (58) of Atlantic salmon of aquaculture origin observed in 2002 was 81% less than the 307 aquaculture origin salmon observed in 2001.

Two juvenile Atlantic salmon from the Alma River (Upper Salmon River), New Brunswick, were determined to have European ancestry and probably were of aquaculture origin. Dr. Patrick O'Reilly, the geneticist that completed the work, provided the following details.

“During a study of kinship and remaining genetic diversity among Atlantic salmon from the Upper Salmon River of the inner Bay of Fundy, nuclear microsatellite alleles were identified in two wild parr, at multiple loci, that are absent or very rare elsewhere in North America, but that are very common in European salmon, particularly so in a popular Norwegian strain analysed earlier. To confirm the partial European ancestry of these suspected European-North American hybrid salmon, a portion of the mitochondrial ND1 locus was sequenced, including two nucleotide sites identified by other researchers as being nearly diagnostic for European ancestry. Results obtained were in agreement with nuclear analyses, confirming European ancestry. The pattern of nuclear and mitochondrial DNA variation observed here and elsewhere in North America implicate a likely aquaculture origin of the European-North American hybrids identified. “

Rainbow trout, believed to be of aquaculture origin or originating from aquaculture escapees, were reported from six (6) rivers on the west and south coast of Newfoundland in 2002, which is 50% fewer rivers than in 2001 (Table 4). These rainbow trout were either caught by anglers, or captured or observed during scientific surveys. Both male and female rainbow trout have been confirmed. A research project conducted on Trout River, western Newfoundland, confirmed that successful reproduction has occurred and at least three year-classes were present. Anglers have reported rainbow trout spawning in three (3) other rivers, on the west coast of Newfoundland, but this has not been confirmed. The Scientific Working Group reiterates its concern that if rainbow trout becomes established, it could negatively impact on the Atlantic salmon and brook trout populations.

Some information, albeit incomplete, was available on observations of rainbow trout in rivers of New Brunswick and Nova Scotia (Table 5). No information was available as to the origin of these fish. In 2002, rainbow trout were reported in only one (1) river in Nova Scotia and no rivers in New Brunswick.

There were no reports of escapements of Atlantic salmon from aquaculture sites in the NAC Area, in 2002. However, there was one report on an escapement in Newfoundland in May 2003. There were reports of two escapements of rainbow trout in Nova Scotia in 2002, and no reports of escapements elsewhere in Canada or in the USA.

4. Current Status of US Efforts to Protect Wild Salmon from Potential Impacts from Aquaculture

On January 12, 2001, the U.S. Fish and Wildlife Service and National Marine Fisheries Service (the Services) issued a Biological Opinion to the Environmental Protection Agency (EPA) on their proposed approval of the State of Maine's application to administer the National Pollution Discharge Elimination System permit program and its effect on the endangered Gulf of Maine Distinct Population Segment of Atlantic salmon. The Biological Opinion contains measures to protect wild salmon including the phase out of Non North American stocks and marking of commercially farmed fish. In early 2003, the Maine Department of Environmental Protection issued a draft general permit for aquaculture operations. Hearings were held and comments solicited and received. A final draft permit was circulated on May 12, 2003, and a final permit decision is anticipated in mid June. The final draft permit includes a prohibition on stocking of Non North American strain Atlantic salmon after July 31, 2004. It requires genetic screening of all broodstock and provides a protocol for conducting such screening and making classifications. The draft also requires marking of all fish placed in net pens.

In April of 2002, the Services initiated formal consultation with the U.S. Army Corps of Engineers (ACOE) and on September 30, 2002 provided the ACOE a draft Biological opinion regarding the ACOE's proposed modifications to existing permits for marine aquaculture sites in order to minimize impacts on endangered Atlantic salmon. The proposed modifications include implementation of marking and a phase out of the use of Non North American strain Atlantic salmon. A final Biological Opinion will be issued shortly.

Environmental organizations have also filed suit against the three main commercial aquaculture companies operating in Maine. One company entered into a consent decree in which it agreed to only use North American strain salmon and also to mark fish as requested by the Services. On May 28, 2003, a United States District Judge issued an Order and Injunction which prohibits the other two companies, irrespective of the provisions of any permit, ruling, rule or regulation, or any state law, from stocking any salmonid fish of non North American stock or genetic strain in waters adjacent to the Maine coast.

Table 1. Summary of total numbers of eggs and fish transferred between Provinces and/or States within the NAC Area during CY 2001 and 2002. USA transfers also includes within state transfers.

	<u>2001</u>		<u>2002</u>	
	<u>Number of shipments</u>	<u>Number of eggs or fish</u>	<u>Number of shipments</u>	<u>Number of eggs or fish</u>
ARTIC CHAR				
CANADA	2	20,000	7	116,300
USA	<u>N/A</u>	<u> </u>	<u>N/A</u>	<u> 0</u>
TOTAL	2	20,000	7	116,300
ATLANTIC SALMON				
CANADA	60	31,459,000	61	43,760,400
USA	<u>27</u>	<u>8,408,631</u>	<u>31</u>	<u>16,745,183</u>
TOTAL	87	39,867,631	92	60,505,583
BROOK TROUT				
CANADA	14	437,050	13	225,035
USA	<u>N/A</u>	<u> </u>	<u>N/A</u>	<u> </u>
TOTAL	14	437,050	13	225,035
BROWN TROUT				
CANADA	0	0	1	10,000
USA	<u>N/A</u>	<u> </u>	<u>N/A</u>	<u> </u>
TOTAL	0	0	1	10,000
RAINBOW TROUT				
CANADA	37	5,003,075	40	8,679,590
USA	<u>N/A</u>	<u> </u>	<u>N/A</u>	<u> </u>
TOTAL	37	5,003,075	40	8,6379,590
<u>Total shipments</u>			140	<u>153</u>

Table 2. Summary of fish disease or agent occurrence for each State and Province within the NAC Area at end of calendar year 2002. See footer for explanation of "occurrence Codes"

State or Province	Bacterial		Enteric		Infectious Hematopoietic Necrosis (IHN)	Infectious Pancreatic Necrosis (IPN)	Infectious Salmon Anemia (ISA)	Oncorhynchus Masou Virus	Viral Hemorrhagic Septicemia (VHS)	Whirling Disease	Other CPE viruses (except IPN)	Salmon Swimbladder Sarcoma**
	Kidney Disease (BKD)	Ceratomyxosis	Redmouth (ERM)	Furunculosis								
		x		x			x	x	x			
CT	1	0	1	2	0	0	0	0	0	2	0	0
LAB	0	0	0	0	0	0	0	0	0	0	0	0
MA	2	0	1	3	0	1	0	0	0	0	0	2
ME	1	0	1	2	0	2	2	0	0	0	2	2*
NB	3	0	1	3	0	2	3	0	3***	0	2	0
NFLD	1	0	1	3	0	2	0	0	0	0	0	0
NH	2	0	1	2	0	3	0	0	0	1	1	0
NJ	1	0	0	1	0	1	0	0	0	1	3	0
NS	3	0	3	2	0	3	0	0	0	0	2	0
NY	No information for 2002											
ONT	3	0	2	3	0	1	0	0	0	0	2	0
PEI	1	0	0	0	0	1	0	0	0	0	0	0
QUE	3	0	2	3	0	3	0	0	0	0	0	0
RI	No information for 2002											
VT	2	0	0	3	0	1	0	0	0	3	0	0
<u>Disease occurrence as reported for year 2000</u>												
NY	1	0	0	2	1	1	0	0	0	3	0	0
RI	0	0	0	2	0	3	0	0	0	3	0	0

Occurrence
 0 = No known historical occurrence within State/ Province
 1 = Historical occurrence but no known occurrence within the last 5 years
 2 = Has occurred during the past 5 years but not during the last Calendar Year
 3 = Verified occurrence during the last Calendar Year within State/Province

x indicates an "EMERGENCY DISEASE" under NAC Protocols for the Introduction and Transfer of Salmo

*Virus found present, but no disease symptoms ever detect.

** New virus: not currently included in the NAC Protocol

*** "North American Strain", Not "European" or "Salmonid" strain

Table 3. Known occurrences of Atlantic salmon aquaculture escapees in salmon rivers within the NAC area.

River (St/Prov)	Number of escapees (escapees as percent of total sample)								Life Stage	
	Prior to 1990	1990 - 1996	1997	1998	1999	2000	2001	2002		
CANADA										
Annapolis (NS)		1			R*****	15				MSW
Baddeck (NS)		23 (6)***		5 (3)						1SW & MSW
Bear (NS)	Many angled in early 1990's								1SW & MSW	
Big Salmon (NB)	1									1SW & MSW
Conne (NF)		3	10(2)	2(1)	1(>1)	5(2.3)	0	0		1SW & MSW
Conne (NF)		71								smolt
Dennis (NB)	R*****									1SW & MSW
Digdeguash (NB)	below hatchery								juveniles	
Gaspereau (NS)		5		1 (4)		1(2)				MSW
Indian Brook (NS)						1				1SW & MSW
LaHave (NS)	1 (<1)	0	0	0						1SW & MSW
Magaguadavic (NB)		2,301	82 (58)	223 (8)	79(77)	30(68)	132(94)	35 (83)		1SW & MSW
Magaguadavic (NB)							35			smolt
Mersey (NS)						1				1SW & MSW
Meteghan (NS)						1				1SW & MSW
Middle (NS)				9 (4)						1SW & MSW
North (NS)		14 (8)***		55 (11)						1SW & MSW
Saint John (NB)		1990, Belle			R*****	R*****	14	8		1SW & MSW
Salmon Digby (NS)					2	0				1SW & MSW
St. Croix (NB/ME) *		231	27 (39)	25 (38)	23(64)	30(60)	58(75)	5 (20)		1SW & MSW
Tusket (NS)				2 (<1)						MSW
Waewig (NB)	juvniiles below hatch. 1 adult								Juveniles and adults	
Stewiacke (NS)		7 (33)	0							MSW
UNITED STATES										
Penobscot River							1(0.1)			
Dennys (ME)**		67	2 (100)	1(100)		29(94)	65(79)	4 (67)		Sexually mature & immature
Narraguagus (ME)		9****	0	0	3 (9)	0	0	0		
Union (ME)					63(90)*****	6(75)	2(100)	6 (55)		
Other Maine Rivers	Unofficial reports of escapes in various eastern coastal rivers, especially Cobscott Bay area									

* 1994-96 aquaculture fish were estimated to be 13-54% of the run.

** Partial counts in Dennys

*** Includes 1995 only; no earlier data

**** includes 1995 and 1996 only.

***** based on scale samples form 11 of 22 adults

R***** escapees reported but number or presence not confirmed

Table 4. Known occurrences of rainbow trout observed in Newfoundland rivers, believed to be aquaculture escapees or progeny of aquaculture escapees.

River (St/Prov)	Number of rainbow trout							Life Stage
	Prior to 1990	1990 - 1997	1998	1999	2000	2001	2002	
Watts Bight Bk (NF)	3							adult
Green Island Cove							1	adult
Western Arm Brook						1		
River of Ponds (NF)	1+	4+*		24	2****	6		adult
Portland Creek (NF)				1				adult
Parsons Pond (NF)		1						adult
Deer Arm Brook						1	1	adult
Lomond River						1		
Trout River (NF)	4	1+	1+	1+**	2***	97+	55+	adult+juv
Bay of Islands							1	adult
Humber River (NF)				3	1**	1	1+	adult
Serpentine (NF)	2							adult
Flat Bay Brook (NF)		1*		2				adult
Robinsons River (NF)				2				adult
Crabbes R (NF)					2			immature
La Poila River (NF)				3				adult
Garia Brook (NF)				3				adult
Grandys River (NF)				2	3*****	3		adult
Unnamed Bk (Bay de Vieux)						1		
White Bear River						1+		
White Bear R Estuary						1+		
Grey River (NF)					1			immature
Northwest Bk					3			adult
Jeddore lake					3			juvenile
Conne River (NF)		218	27	21	45	18+	1	adult
Little River (NF)		5		1				adult
Garnish River (NF)			2+					
Long Harbour R (NF)			1+			2		adult
Grand Bank Bk (NF)			1+					adult
Lawn Bk (NF)					1			adult
Holyrood Pond					3			adult
Biscay Bay Bk (NF)			2					adult

* 1 Male (internally sexed)

** 1 Female (internally sexed)

*** 2 females, immature

**** 1 was a spent female, and 1 was a male

***** 1 was a ripe male

Table 5. Reports of rainbow trout observed in New Brunswick and Nova Scotia rivers. Rainbow trout in some Nova Scotia rivers maybe from directed stocking programs. Table is incomplete.

River (St/Prov)	Number of Rainbow trout						Life Stage
	1995 - 1997	1998	1999	2000	2001	2002	
Saint John R (NB)	13			1	2		
Nashwaak R (NB)							
Big Salmon R (NB)				18	8		
Shepody R* (NB)				1			Juvenile
Upper Salmon R (NB)					1		Juvenile
Sutherlands R (NS)	1						
Salmon R (NS)			2 - 4				immature
Mersey R (NS)			2				
Tusket R (NS)			5+				
Middle R (NS)			2		11		adult
North R (NS)			1+			2	Juveniles
St. Mary's R (NS)			1				Juvenile
River Tillard				1+			
Baddeck R (NS)				8			1adult+Juv
Musquodoboit (NS)					2+		adult
River Philip (NS)					12		~30 cm

* Shepody River has a self sustaining population of rainbow trout. Rainbow trout angled annually.

Appendix 1. Report of Salmonid Introductions and Transfers in NAC Area in 2001

<i>File #</i>	<i>Facility Of Origin</i>	<i>Stock/Strain</i>	<i>LifeStage</i>	<i>Reprod.</i>	<i>Number Shipped</i>	<i>Receiving Facility Type</i>	<i>Planned Use</i>
<u>MAINE</u>							
<u>ATLANTIC SALMON</u>							
1175	Atlantic Salmon of Maine-Embden (ME)	Landcatch-hybr	Smolt	Y	150,325	Private	Aquaculture (sea pen)
1182	Gardner Lake Hatchery (ME)	Penobscot R.	Smolt	Y	300,616	Private	Aquaculture (sea pen)
1190	Atlantic Salmon of Maine-Oquossoc (ME)	Various	Smolt	Y	441,550	Private	Aquaculture (sea pen)
1183	Atlantic Salmon of Maine-Embden (ME)	Various	Smolt	Y	201,625	Private	Aquaculture (sea pen)
1178	Connors Bros (NB) Heritage S - Lake Utopia	St John R	Smolt	Y	179,280	Private	Aquaculture (sea pen)
1180	Bingham Aquaculture Ltd. (ME)	St John R	Smolt	Y	288,040	Private	Aquaculture (sea pen)
1184	Atlantic Salmon Maine Starboard	Various	Adults	Y	1,056	Private	Brood Stock Dev.
1177	Gardner Lake Hatchery (ME)	Penobscot R.	Smolt	Y	151,996	Private	Aquaculture (sea pen)
1176	Gardner Lake Hatchery (ME)	Penobscot R.	Smolt	Y	117,027	Private	Aquaculture (sea pen)
1189	Connors Bros (NB) Heritage S - Lake Utopia	St John R	Smolt	Y	150,379	Private	Aquaculture (sea pen)
1174	Atlantic Salmon of Maine-Embden (ME)	St John R	Smolt	Y	52,568	Private	Aquaculture (sea pen)
1173	Atlantic Salmon of Maine-Embden (ME)	Landcatch-hybr	Smolt	Y	604,904	Private	Aquaculture (sea pen)
1168	Atlantic Salmon of Maine-Oquossoc (ME)	Landcatch-hybr	Smolt	Y	22,350	Private	Aquaculture (sea pen)
1186	Atlantic Salmon of Maine-Embden (ME)	Various	Eggs	Y	1,550,000	Private	Aquaculture (misc. inland)
1181	Huntsman Marine Lab. (NB)	St John R	Smolt	Y	8,622	Private	Brood Stock Dev.
1188	Gardner Lake Hatchery (ME)	Penobscot R.	Smolt	Y	95,132	Private	Aquaculture (sea pen)
1167	Atlantic Salmon of Maine-Oquossoc (ME)	Landcatch-hybr	Smolt	Y	246,800	Private	Aquaculture (sea pen)
1179	Bingham Aquaculture Ltd. (ME)	St John R	Smolt	Y	24,000	Private	Aquaculture (sea pen)
1185	Atlantic Salmon Maine Starboard	St John R	Adults	Y	976	Private	Brood Stock Dev.
1166	Stolts Bristol Hatchery (NH)	St John R	Smolt	Y	314,268	Private	Aquaculture (sea pen)
1187	Atlantic Salmon of Maine-Embden (ME)	St John R	Eggs	Y	2,500,000	Private	Aquaculture (misc. inland)

Friday, May 30, 2003

<i>File #</i>	<i>Facility Of Origin</i>	<i>Stock/Strain</i>	<i>LifeStage</i>	<i>Reprod.</i>	<i>Number Shipped</i>	<i>Receiving Facility Type</i>	<i>Planned Use</i>
1165	Connors Aquaculture (ME)	St John R	Smolt	Y	150,266	Unknown	Aquaculture (sea pen)
1164	Connors Aquaculture (ME)	St John R	Smolt	Y	239,237	Unknown	Aquaculture (sea pen)
1169	Connors Aquaculture (ME)	St John R	Smolt	Y	81,454	Unknown	Aquaculture (sea pen)
1171	Connors Bros (NB) Heritage S - Lake Utopia	St John R	Smolt	Y	237,451	Unknown	Aquaculture (sea pen)
1172	Atlantic Salmon of Maine-Oquossoc (ME)	Landcatch-hybr	Smolt	Y	286,550	Unknown	Aquaculture (sea pen)
1170	Connors Aquaculture (ME)	Penobscot R.	Smolt	Y	12,159	Unknown	Aquaculture (sea pen)

NEW BRUNSWICK

ARTIC CHAR

886	Cardigan Hatchery (PEI)	Unknown	Juveniles	Y	10,000	Private	Pop. Enhanc. (sea-run)
887	Cardigan Hatchery (PEI)	Unknown	Juveniles	Y	10,000	Private	Aquaculture (misc. inland)

ATLANTIC SALMON

919	Cascade Aqua Farms (WA)	Gaspé	Eggs	N	280,000	Private	Aquaculture (misc. inland)
923	Cascade Aqua Farms (WA)	Gaspé	Eggs	N	500,000	Private	Aquaculture (misc. inland)
911	Bingham Aquaculture Ltd. (ME)	St John R	Fry	Y	200,000	Private	Aquaculture (misc. inland)
916	Merlin Fish Farms (NS)	St John R	Smolt	Y	110,000	Private	Aquaculture (sea pen)
920	Atlantic Salmon of Maine-Cross Island	St John R	Eggs	Y	1,250,000	Private	Aquaculture (misc. inland)
917	Bingham Aquaculture Ltd. (ME)	St John R	Smolt	Y	362,000	Private	Aquaculture (sea pen)
918	Merlin Fish Farms (NS)	St John R	Fry	Y	500,000	Private	Aquaculture (misc. inland)
922	Atlantic Salmon of Maine-Cross Island	St John R	Eggs	Y	2,250,000	Private	Aquaculture (misc. inland)
915	Bingham Aquaculture Ltd. (ME)	St John R	Smolt	Y	350,000	Private	Aquaculture (sea pen)
907	Connors Aquaculture (ME)	St John R	Fry	Y	500,000	Private	Aquaculture (misc. inland)
912	Atlantic Salmon of Maine-Cross Island	Unknown	Eggs	Y	1,000,000	Private	Aquaculture (misc. inland)
921	Little Harbour Hatchery (NS)	St John R	Eggs	Y	250,000	Private	Aquaculture (misc. inland)
905	Broad Cove Cage Site (ME)	St John R	Eggs	Y	2,750,000	Private	Aquaculture (misc. inland)
913	Connors Aquaculture (ME)	St John R	Parr	Y	600,000	Private	Aquaculture (misc. inland)

Friday, May 30, 2003

<i>File #</i>	<i>Facility Of Origin</i>	<i>Stock/Strain</i>	<i>LifeStage</i>	<i>Reprod.</i>	<i>Number Shipped</i>	<i>Receiving Facility Type</i>	<i>Planned Use</i>
909	Bingham Aquaculture Ltd. (ME)	St John R	Fry	Y	500,000	Private	Aquaculture (misc. inland)
910	Merlin Fish Farms (NS)	St John R	Fry	Y	500,000	Private	Aquaculture (misc. inland)
914	Cascade Aqua Farms (WA)	Gaspé	Eggs	N	300,000	Private	Aquaculture (Unspecified)
908	Gardner Lake Hatchery (ME)	St John R	Fry	Y	500,000	Private	Aquaculture (misc. inland)
904	Trumpet Island Hatchery (ME)	St John R	Eggs	Y	2,750,000	Private	Aquaculture (misc. inland)
906	Broad Cove Cage Site (ME)	St John R	Eggs	Y	2,750,000	Research/Educ.	Aquaculture (misc. inland)
924	Cascade Aqua Farms (WA)	Gaspé	Eggs	N	50,000	Research/Educ.	Aquaculture (misc. inland)
903	Trumpet Island Hatchery (ME)	St John R	Eggs	Y	2,750,000	Research/Educ.	Aquaculture (misc. inland)

BROOK TROUT

891	Pisciculture Alleghanys (QUE)	Unknown	Eggs	Y	20,000	Private	Aquaculture (misc. inland)
893	Pisciculture Alleghanys (QUE)	Unknown	Juveniles	Y	10,000	Private	Pop. Enhanc. (sea-run)
896	Pisciculture Alleghanys (QUE)	Unknown	Eggs	Y	10,000	Private	Aquaculture (misc. inland)
889	Pisciculture Alleghanys (QUE)	Unknown	Eggs	Y	200,000	Private	Aquaculture (misc. inland)
897	Pisciculture Alleghanys (QUE)	Unknown	Eggs	Y	25,000	Private	Aquaculture (misc. inland)
898	Pisciculture Alleghanys (QUE)	Unknown	Eggs	Y	50,000	Private	Aquaculture (misc. inland)
892	Pisciculture St Damien (QUE)	Unknown	Eggs	Y	75,000	Private	Aquaculture (misc. inland)
895	Pisciculture Alleghanys (QUE)	Unknown	Eggs	N	1,000	Research/Educ.	Aquaculture (misc. inland)
894	Pisciculture Alleghanys (QUE)	Unknown	Eggs	Y	1,000	Research/Educ.	Pop. Enhanc. (Inland)
888	Pisciculture Alleghanys (QUE)	Unknown	Eggs	Y	15,000	Research/Educ.	Research/Education
890	Cardigan Hatchery (PEI)	Unknown	Adults	Y	50	Research/Educ.	Research/Education

RAINBOW TROUT

902	Atlantic Sea Smolt (PEI)	Unknown	Fingerlings	N		Gov-Federal (Can)	Bio-monitoring
901	Rainbow Springs Hatchery (ONT)	Unknown	Eggs	N		Gov-Federal (Can)	Bio-monitoring
900	Pisciculture Alleghanys (QUE)	Unknown	Eggs	N	50,000	Private	Aquaculture (misc. inland)
899	Cardigan Hatchery (PEI)	Unknown	Juveniles	N	75	Research/Educ.	Research/Education

Friday, May 30, 2003

<i>File #</i>	<i>Facility Of Origin</i>	<i>Stock/Strain</i>	<i>LifeStage</i>	<i>Reprod.</i>	<i>Number Shipped</i>	<i>Receiving Facility Type</i>	<i>Planned Use</i>
<u>NEWFOUNDLAND</u>							
<u>ATLANTIC SALMON</u>							
884	Trout Lodge (WA)	Gaspé	Eggs	Y	175,000	Private	Aquaculture (misc. inland)
885	Atlantic Sea Smolt (PEI)	St John R	Eggs	Y	175,000	Private	Aquaculture (misc. inland)
882	Little Harbour Hatchery (NS)	Unknown	Eggs	Y	1,000,000	Private	Aquaculture (Unspecified)
883	Little Harbour Hatchery (NS)	Unknown	Eggs	Y	400,000	Private	Aquaculture (Unspecified)
881	Atlantic Sea Smolt (PEI)	Unknown	Eggs	Y	30,000	Research/Educ.	Research/Education
<u>BROOK TROUT</u>							
877	Pisciculture St Damien (QUE)	Unknown	Eggs	Y	10,000	Research/Educ.	Research/Education
<u>RAINBOW TROUT</u>							
879	Pisciculture St Damien (QUE)	Unknown	Eggs	N	15,000	Private	Aquaculture (misc. inland)
874	North River Fish Farm (NS)	Unknown	Parr	Y	50,000	Private	Aquaculture (sea pen)
871	Old Mill Streams Aquafarms (NS)	Silver bullets	Parr	Y	200,000	Private	Aquaculture (sea pen)
870	Big Falls Fish Growers (NS)	Unknown	Parr	Y	220,000	Private	Aquaculture (sea pen)
867	Trout Lodge (WA)	Unknown	Eggs	Y	250,000	Private	Aquaculture (misc. inland)
873	North River Fish Farm (NS)	Silver bullets	Parr	Y	50,000	Private	Aquaculture (sea pen)
880	Pisciculture Alleghanys (QUE)	Unknown	Eggs	N	15,000	Private	Aquaculture (misc. inland)
878	Atlantic Sea Smolt (PEI)	Unknown	Fry	N	1,000	Private	Aquaculture (sea pen)
863	Rainbow Springs Hatchery (ONT)	Unknown	Fry	N	20,000	Private	Aquaculture (misc. inland)
864	Atlantic Sea Smolt (PEI)	Unknown	Eggs	N	10,000	Private	Aquaculture (Unspecified)
866	North River Fish Farm (NS)	Unknown	Parr	Y	50,000	Private	Aquaculture (sea pen)
868	Big Falls Fish Growers (NS)	Unknown	Parr	Y	250,000	Private	Aquaculture (sea pen)
876	Old Mill Streams Aquafarms (NS)	Silver bullets	Parr	Y	200,000	Private	Aquaculture (sea pen)
875	North River Fish Farm (NS)	Silver bullets	Parr	Y	200,000	Private	Aquaculture (sea pen)
865	Pisciculture St Damien (QUE)	Unknown	Eggs	N	50,000	Private	Aquaculture (Unspecified)

Friday, May 30, 2003

File #	Facility Of Origin	Stock/Strain	LifeStage	Reprod.	Number Shipped	Receiving Facility Type	Planned Use
869	Big Falls Fish Growers (NS)	Unknown	Fry	Y	300,000	Private	Aquaculture (sea pen)
872	Big Falls Fish Growers (NS)	Silver bullets	Fry	Y	220,000	Private	Aquaculture (sea pen)

NOVA SCOTIA

ATLANTIC SALMON

844	Connors Bros (NB) Heritage S - Lake Utopia	St John R	Fry	Y	500,000	Private	Aquaculture (misc. inland)
861	Cascade Aqua Farms (WA)	Gaspé	Eggs	N	50,000	Private	Aquaculture (misc. inland)
852	Scotia Salmon Farms (NB)	St John R	Eggs	Y	1,000,000	Private	Aquaculture (misc. inland)
846	Connors Aquaculture (ME)	St John R	Fry	Y		Private	Aquaculture (misc. inland)
848	Huntsman Marine Lab. (NB)	St John R	Smolt	Y	4,000	Private	Aquaculture (misc. inland)
847	Huntsman Marine Lab. (NB)	St John R	Fry	Y	200,000	Private	Aquaculture (misc. inland)
851	Bingham Aquaculture Ltd. (ME)	St John R	Fry	Y	70,000	Private	Aquaculture (misc. inland)
857	Oak Bay Hatchery (NB)	St John R	Smolt	Y	150,000	Private	Aquaculture (sea pen)
850	Bingham Aquaculture Ltd. (ME)	St John R	Fry	Y	100,000	Private	Aquaculture (sea pen)
845	Gardner Lake Hatchery (ME)	St John R	Fry	Y		Private	Aquaculture (misc. inland)
835	Stolt Sea Farms (NB)	St John R	Smolt	Y	17,500	Private	Aquaculture (sea pen)
841	Huntsman Marine Lab. (NB)	St John R	Fry	Y	125,000	Private	Aquaculture (misc. inland)
838	Springdale (NB)	St John R	Fry	Y	400,000	Private	Aquaculture (FW pen)
832	Aqua Fish Farms Penobquis (NB)	St John R	Smolt	Y	160,000	Private	Aquaculture (sea pen)
862	Connors Bros (NB) Heritage S - Lake Utopia	St John R	Smolt	Y		Private	Aquaculture (misc. inland)
836	Gardner Lake Hatchery (ME)	St John R	Smolt	Y	30,000	Private	Aquaculture (misc. inland)
860	Chamcook-ASF (NB)	St John R	Smolt	Y	20,000	Private	Aquaculture (sea pen)
859	Thomaston Corner H (NB) - Cooke Aquaculture	St John R	Smolt	Y	300,000	Private	Aquaculture (sea pen)
842	Huntsman Marine Lab. (NB)	St John R	Fry	Y	200,000	Private	Aquaculture (misc. inland)
849	Bingham Aquaculture Ltd. (ME)	St John R	Smolt	Y	140,000	Private	Aquaculture (sea pen)
830	Oak Bay Hatchery (NB)	St John R	Eggs	Y	260,000	Private	Aquaculture (misc. inland)
843	Oak Bay Hatchery (NB)	St John R	Fry	Y	200,000	Private	Aquaculture (misc. inland)

Friday, May 30, 2003

File #	Facility Of Origin	Stock/Strain	LifeStage	Reprod.	Number Shipped	Receiving Facility Type	Planned Use
853	Scotia Salmon Farms (NB)	St John R	Eggs	Y	3,000,000	Private	Aquaculture (misc. inland)
834	Novagro Aquanauts (PEI)	St John R	Eggs	Y	26,000	Private	Aquaculture (misc. inland)
833	Oak Bay Hatchery (NB)	St John R	Smolt	Y	1,175,000	Private	Aquaculture (sea pen)
829	Connors Aquaculture (ME)	St John R	Eggs	Y	500,000	Private	Aquaculture (misc. inland)
837	Chamcook-ASF (NB)	St John R	Smolt	Y	4,000	Private	Aquaculture (misc. inland)
858	Oak Bay Hatchery (NB)	St John R	Smolt	Y		Private	Aquaculture (sea pen)
855	Huntsman Marine Lab. (NB)	St John R	Eggs	Y	6,000	Research/Educ.	Research/Education
856	Huntsman Marine Lab. (NB)	St John R	Milt	Y		Research/Educ.	Research/Education

RAINBOW TROUT

854	Rainbow Springs Hatchery (ONT)	Unknown	Eggs	Y	100,000	Gov-Provincial	Pop. Enhanc. (Inland)
831	Trout Lodge (WA)	Unknown	Eggs	Y	500,000	Private	Aquaculture (misc. inland)

ONTARIO

BROOK TROUT

825	Pisciculture Alleghanys (QUE)	Unknown	Eggs	Y	10,000	Private	Aquaculture (Unspecified)
821	Pisciculture Alleghanys (QUE)	Unknown	Eggs	Y	10,000	Private	Aquaculture (misc. inland)

RAINBOW TROUT

820	Troutsprings (WA)	Unknown	Eggs	Y	340,000	Gov-Provincial	Aquaculture (misc. inland)
822	Troutsprings (WA)	Unknown	Eggs	Y	140,000	Gov-Provincial	Aquaculture (Unspecified)
815	Troutsprings (WA)	Unknown	Eggs	Y	268,000	Gov-Provincial	Aquaculture (misc. inland)
824	Troutsprings (WA)	Unknown	Eggs	Y	383,000	Gov-Provincial	Aquaculture (Unspecified)
817	Atlantic Sea Smolt (PEI)	Unknown	Eggs	Y	20,000	Private	Aquaculture (misc. inland)
818	Troutsprings (WA)	Unknown	Eggs	Y	60,000	Private	Aquaculture (misc. inland)
816	Troutsprings (WA)	Unknown	Eggs	Y	200,000	Private	Aquaculture (misc. inland)
819	Troutsprings (WA)	Unknown	Eggs	Y	200,000	Private	Aquaculture (misc. inland)
823	Troutsprings (WA)	Unknown	Eggs	Y	350,000	Private	Aquaculture (Unspecified)

Friday, May 30, 2003

<i>File #</i>	<i>Facility Of Origin</i>	<i>Stock/Strain</i>	<i>LifeStage</i>	<i>Reprod.</i>	<i>Number Shipped</i>	<i>Receiving Facility Type</i>	<i>Planned Use</i>
<u>PRINCE EDWARD ISLAND</u>							
<u>ATLANTIC SALMON</u>							
928	NBSGA Pedigree Broodstock Program (NB) St.	St John R	Smolt	Y	2,500	Private	Aquaculture (FW pen)
925	Qualtiy Fish Farm (NB)	Unknown	Parr	Y	7,000	Private	Research/Education
929	NBSGA Pedigree Broodstock Program (NB) St.	St John R	Eggs	Y	30,000	Private	Aquaculture (Unspecified)
<u>RAINBOW TROUT</u>							
926	Troutsprings (WA)	Unknown	Eggs	Y	3,000	Private	Research/Education
927	Troutsprings (WA)	Unknown	Eggs	Y	3,000	Private	Research/Education
<u>QUEBEC</u>							
<u>RAINBOW TROUT</u>							
828	Trout Lodge (WA)	Unknown	Eggs	Y	120,000	Private	Aquaculture (Unspecified)
826	Trout Lodge (WA)	Unknown	Eggs	Y	90,000	Private	Aquaculture (Unspecified)
827	Trout Lodge (WA)	Unknown	Eggs	Y	75,000	Private	Aquaculture (Unspecified)

Friday, May 30, 2003

Appendix 2. Report of Salmonid Introductions and Transfers in NAC Area - 2002

<i>File #</i>	<i>Facility Of Origin</i>	<i>Stock/Strain</i>	<i>LifeStage</i>	<i>Reprod.</i>	<i>Number Shipped</i>	<i>Receiving Facility Type</i>	<i>Planned Use</i>
<u>MAINE</u>							
<u>ATLANTIC SALMON</u>							
1209	Bingham Aquaculture Ltd. (ME)	Various	Smolt	Y	122,500	Private	Aquaculture (sea pen)
1204	Bingham Aquaculture Ltd. (ME)	Various	Smolt	Y	151,399	Private	Aquaculture (sea pen)
1205	Bingham Aquaculture Ltd. (ME)	St John R	Smolt	Y	100,054	Private	Aquaculture (sea pen)
1212	Stolts Bristol Hatchery (NH)	St John R	Smolt	Y	300,012	Private	Aquaculture (sea pen)
1192	Connors Bros (NB) Heritage S - Lake Utopia	St John R	Smolt	Y	210,578	Private	Aquaculture (sea pen)
1206	Bingham Aquaculture Ltd. (ME)	Various	Smolt	Y	29,166	Private	Aquaculture (sea pen)
1219	Acadia Aquaculture Inc (ME)	St John R	Eggs	Y	3,100,000	Private	Aquaculture (misc. inland)
1208	Bingham Aquaculture Ltd. (ME)	St John R	Smolt	Y	17,500	Private	Aquaculture (sea pen)
1202	Atlantic Salmon of Maine-Oquossoc (ME)	Various	Smolt	Y	300,400	Private	Aquaculture (sea pen)
1210	Bingham Aquaculture Ltd. (ME)	Various	Smolt	Y	179,000	Private	Aquaculture (sea pen)
1211	Bingham Aquaculture Ltd. (ME)	St John R	Smolt	Y	35,000	Private	Aquaculture (sea pen)
1191	Connors Bros (NB) Heritage S - Lake Utopia	St John R	Smolt	Y	611,872	Private	Aquaculture (sea pen)
1214	Island Aquaculture Inc (ME)	Various	Adults	Y	754	Private	Brood Stock Dev.
1215	Island Aquaculture Inc (ME)	Various	Adults	Y	581	Private	Brood Stock Dev.
1216	Island Aquaculture Inc (ME)	Penobscot R.	Adults	Y	272	Private	Brood Stock Dev.
1207	Bingham Aquaculture Ltd. (ME)	St John R	Smolt	Y	145,830	Private	Aquaculture (sea pen)
1221	Oak Bay Hatchery (NB)	St John R	Eggs	Y	149,000	Private	Aquaculture (misc. inland)
1217	Acadia Aquaculture Inc (ME)	St John R	Eggs	Y	5,887,500	Private	Aquaculture (misc. inland)
1193	Gardner Lake Hatchery (ME)	St John R	Smolt	Y	116,111	Private	Aquaculture (sea pen)
1194	Gardner Lake Hatchery (ME)	St John R	Smolt	Y	140,308	Private	Aquaculture (sea pen)
1213	Chamcook-ASF (NB)	St John R	Adults	Y	5,000	Private	Brood Stock Dev.

Friday, May 30, 2003

<i>File #</i>	<i>Facility Of Origin</i>	<i>Stock/Strain</i>	<i>LifeStage</i>	<i>Reprod.</i>	<i>Number Shipped</i>	<i>Receiving Facility Type</i>	<i>Planned Use</i>
1222	Connors Aquaculture (ME)	St John R	Eggs	Y	1,200,000	Private	Aquaculture (misc. inland)
1220	Acadia Aquaculture Inc (ME)	Penobscot R.	Eggs	Y	2,450,000	Private	Aquaculture (misc. inland)
1203	Atlantic Salmon of Maine-Oquosoc (ME)	Various	Smolt	Y	234,241	Private	Aquaculture (sea pen)
1195	Atlantic Salmon of Maine-Embden (ME)	Various	Smolt	Y	235,363	Private	Aquaculture (sea pen)
1196	Atlantic Salmon of Maine-Embden (ME)	St John R	Smolt	Y	5,014	Private	Aquaculture (sea pen)
1197	Atlantic Salmon of Maine-Embden (ME)	Various	Smolt	Y	122,371	Private	Aquaculture (sea pen)
1201	Atlantic Salmon of Maine-Oquosoc (ME)	Various	Smolt	Y	254,050	Private	Aquaculture (sea pen)
1198	Atlantic Salmon of Maine-Embden (ME)	Various	Smolt	Y	214,213	Private	Aquaculture (sea pen)
1199	Atlantic Salmon of Maine-Embden (ME)	St John R	Smolt	Y	11,741	Private	Aquaculture (sea pen)
1200	Atlantic Salmon of Maine-Embden (ME)	Various	Smolt	Y	415,353	Private	Aquaculture (sea pen)

NEW BRUNSWICK

ARTIC CHAR

1111	Icy Waters (YUK)	Yukon Gold	Eggs	Y	600	Private	Aquaculture (misc. inland)
1112	Winter Springs Aquaculture (PEI)	Fraser R.	Fingerlings	Y	500	Private	Aquaculture (misc. inland)

ATLANTIC SALMON

1130	Connors Aquaculture (ME)	St John R	Pre-smolt	Y	600	Gov-Federal (Can)	Research/Education
1122	Bingham Aquaculture Ltd. (ME)	St John R	Parr	Y	500,000	Private	Aquaculture (misc. inland)
1146	Trumpet Island Hatchery (ME)	St John R	Eggs	Y	500,000	Private	Aquaculture (misc. inland)
1138	Gardner Lake Hatchery (ME)	St John R	Smolt	Y	200,000	Private	Aquaculture (sea pen)
1145	Scotia Aqua Inc (NS)	St John R	Smolt	Y	300,000	Private	Aquaculture (sea pen)
1128	Bingham Aquaculture Ltd. (ME)	St John R	Smolt	Y	15,000	Private	Aquaculture (sea pen)
1118	Aqua Fish Farms (NS)	St John R	Eggs	Y	5,000,000	Private	Aquaculture (misc. inland)
1115	AKM Fisheries (NS)	St John R	Smolt	Y	40,000	Private	Aquaculture (sea pen)
1142	Merlin Fish Farms (NS)	St John R	Smolt	Y	70,000	Private	Aquaculture (sea pen)
1121	Bingham Aquaculture Ltd. (ME)	St John R	Parr	Y	150,000	Private	Aquaculture (misc. inland)

Friday, May 30, 2003

File #	Facility Of Origin	Stock/Strain	LifeStage	Reprod.	Number Shipped	Receiving Facility Type	Planned Use
1139	Gardner Lake Hatchery (ME)		Smolt	Y	120,000	Private	Aquaculture (sea pen)
1126	Bingham Aquaculture Ltd. (ME)	St John R	Smolt	Y	25,000	Private	Aquaculture (sea pen)
1114	Cascade Aqua Farms (WA)	Gaspé	Eggs	N	500,000	Private	Aquaculture (misc. inland)
1134	Dover Hatchery (PEI)	St John R	Eggs	Y	6,000,000	Private	Aquaculture (misc. inland)
1124	Bingham Aquaculture Ltd. (ME)	St John R	Smolt	Y	15,000	Private	Aquaculture (sea pen)
1125	Bingham Aquaculture Ltd. (ME)	St John R	Smolt	Y	70,000	Private	Aquaculture (sea pen)
1147	Trumpet Island Hatchery (ME)	St John R	Eggs	Y	15,000,000	Private	Aquaculture (misc. inland)
1127	Bingham Aquaculture Ltd. (ME)	St John R	Smolt	Y	45,000	Private	Aquaculture (sea pen)
1141	Gardner Lake Hatchery (ME)	St John R	Smolt	Y	300,000	Private	Aquaculture (sea pen)
1140	Gardner Lake Hatchery (ME)	St John R	Smolt	Y	180,000	Private	Aquaculture (sea pen)
1129	Connors Aquaculture (ME)	St John R	Fry	Y	1,000,000	Private	Aquaculture (misc. inland)
1135	Gardner Lake Hatchery (ME)	St John R	Fry	Y	100,000	Private	Aquaculture (misc. inland)
1136	Gardner Lake Hatchery (ME)	St John R	Fry	Y	200,000	Private	Aquaculture (misc. inland)
1143	Novagro Aquanauts (NS)	St John R	Fry	Y	400,000	Private	Aquaculture (misc. inland)
1123	Bingham Aquaculture Ltd. (ME)	St John R	Fry	Y	500,000	Private	Aquaculture (misc. inland)
1116	AKM Fisheries (NS)	St John R	Eggs	Y	300,000	Private	Aquaculture (misc. inland)
1132	Double O Hatchery (NS) Cooke Aquaculture	St John R	Parr	Y	132,000	Private	Aquaculture (misc. inland)
1119	Atlantic Sea Smolt (PEI)	St John R	Eggs	Y	150,000	Private	Aquaculture (misc. inland)
1113	Cascade Aqua Farms (WA)	Gaspé	Eggs	N	1,000,000	Private	Aquaculture (misc. inland)
1131	Connors Aquaculture (ME)	St John R	Eggs	Y	4,000,000	Private	Aquaculture (misc. inland)
1120	Atlantic Sea Smolt (PEI)	St John R	Fry	Y	50,000	Private	Aquaculture (misc. inland)
1137	Gardner Lake Hatchery (ME)	St John R	Fry	Y	400,000	Private	Aquaculture (misc. inland)
1117	Aqua Fish Farms (NS)	St John R	Eggs	Y	700,000	Research/Educ.	Aquaculture (misc. inland)
1133	Dover Hatchery (PEI)	St John R	Eggs	Y	600,000	Research/Educ.	Aquaculture (misc. inland)
1144	Scotia Aqua Inc (NS)	St John R	Smolt	Y	67,000	Unknown	Aquaculture (sea pen)

BROOK TROUT

1150	Pisciculture Alleghany (QUE)		Eggs	Y	40,000	Private	Aquaculture (misc. inland)
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Friday, May 30, 2003

<i>File #</i>	<i>Facility Of Origin</i>	<i>Stock/Strain</i>	<i>LifeStage</i>	<i>Reprod.</i>	<i>Number Shipped</i>	<i>Receiving Facility Type</i>	<i>Planned Use</i>
1149	Pisciculture Alleghanys (QUE)		Eggs	Y	25,000	Private	Aquaculture (misc. inland)
1153	Pisciculture Alleghanys (QUE)		Eggs	Y	30,000	Private	Aquaculture (misc. inland)
1154	Pisciculture Alleghanys (QUE)		Adults	Y	1,500	Private	Aquaculture (Unspecified)
1156	Pisciculture Alleghanys (QUE)		Eggs	N	50,000	Private	Aquaculture (misc. inland)
1151	Pisciculture Alleghanys (QUE)		Eggs	Y	10,000	Private	Aquaculture (misc. inland)
1155	Pisciculture Alleghanys (QUE)		Eggs	Y	10,000	Private	Aquaculture (misc. inland)
1152	Pisciculture Alleghanys (QUE)		Eggs	Y	15,000	Private	Aquaculture (misc. inland)
1158	Cardigan Hatchery (PEI)		Adults	Y	10	Research/Educ.	Research/Education
1148	Pisciculture Alleghanys (QUE)		Eggs	Y	12,500	Research/Educ.	Aquaculture (misc. inland)
1157	Cardigan Hatchery (PEI)		Adults	Y	25	Research/Educ.	Research/Education

RAINBOW TROUT

1161	Add Later		Fingerlings	Y	10,000	Gov-Federal (Can)	Research/Education
1160	Add Later		Eggs	Y	10,000	Gov-Federal (Can)	Research/Education
1159	Pisciculture Alleghanys (QUE)		Eggs	N	85,000	Private	Aquaculture (misc. inland)
1163	Cardigan Hatchery (PEI)		Adults	N	60	Research/Educ.	Research/Education
1162	Cardigan Hatchery (PEI)		Juveniles	N	180	Research/Educ.	Research/Education

NEWFOUNDLAND

ARTIC CHAR

1103	Cardigan Hatchery (PEI)		Adults	Y	200	Final Disp.	Aquaculture (misc. inland)
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ATLANTIC SALMON

1106	Stolt Sea Farms (NB)	St John R	Parr	Y	285,000	Private	Aquaculture (sea pen)
1107	Trout Lodge (WA)	Gaspé	Eggs	Y	600,000	Private	Aquaculture (Unspecified)
1105	Bingham Aquaculture Ltd. (ME)		Smolt	Y	400,000	Private	Aquaculture (sea pen)
1108	Atlantic Sea Smolt (PEI)	St John R	Eggs	Y	600,000	Private	Aquaculture (Unspecified)
1104	Digdequash hatchery (NB)	St John R	Smolt	Y	300,000	Private	Aquaculture (sea pen)

Friday, May 30, 2003

File #	Facility Of Origin	Stock/Strain	LifeStage	Reprod.	Number Shipped	Receiving Facility Type	Planned Use
1109	Aqua Bounty Farms (PEI)	St John R	Smolt	Y	1,200	Research/Educ.	Research/Education
<u>RAINBOW TROUT</u>							
1100	North River Fish Farm (NS)	Silver bullets	Smolt	Y	300,000	Private	Aquaculture (sea pen)
1101	Big Falls Fish Growers (NS)	Silver bullets	Smolt	Y	250,000	Private	Aquaculture (sea pen)
1097	Big Falls Fish Growers (NS)	All Female	Pre-smolt	Y	741,000	Private	Aquaculture (sea pen)
1098	Trout Lodge (WA)	All Female	Eggs	Y	225,000	Private	Unspecified
1102	Big Falls Fish Growers (NS)	Silver bullets	Smolt	Y	100,000	Private	Aquaculture (sea pen)
1096	Pisciculture St Damien (QUE)	Triploid	Eggs	N	10,000	Private	Unspecified
1094	Pisciculture St Damien (QUE)	Triploid	Eggs	N	30,000	Private	Unspecified
1095	Aqua Bounty Farms (PEI)	Transgenic	Eggs	Y	20,000	Research/Educ.	Research/Education
1099	Rainbow Springs Hatchery (ONT)		Sub-Adult	Y	350	Research/Educ.	Research/Education

NOVA SCOTIA

ARTIC CHAR

1087	Pisciculture Alleghans (QUE)		Eggs	Y	30,000	Private	Aquaculture (Unspecified)
1068	Pisciculture Alleghans (QUE)	Fraser R /	Eggs	Y	40,000	Private	Aquaculture (Unspecified)
1067	Pisciculture Alleghans (QUE)	Fraser R.	Eggs	Y	15,000	Private	Aquaculture (Unspecified)
1088	Pisciculture St Damien (QUE)		Eggs	Y	30,000	Private	Aquaculture (Unspecified)

ATLANTIC SALMON

1110	Tay Falls Cooke Aquaculture (NB)	St John R	Fry	Y	300,000	Private	Aquaculture (Unspecified)
1074	Oak Bay Hatchery (NB)	St John R	Sub-Adult	Y	7,000	Private	Aquaculture (sea pen)
1082	Stolt Sea Farms (NB)	St John R	Fry	Y	100,000	Private	Aquaculture (Unspecified)
1083	Atlantic Sea Smolt (PEI)	St John R	Fry	Y	30,000	Private	Aquaculture (Unspecified)
1070	Connors Bros (NB) Heritage S - Lake Utopia	St John R	Eggs	Y	1,000,000	Private	Aquaculture (Unspecified)
1084	Chamcook-ASF (NB)	St John R	Fry	Y	30,000	Private	Aquaculture (Unspecified)
1090	Stolt Sea Farms (NB)	St John R	Fingerlings	Y	50,000	Private	Aquaculture (Unspecified)

Friday, May 30, 2003

File #	Facility Of Origin	Stock/Strain	LifeStage	Reprod.	Number Shipped	Receiving Facility Type	Planned Use
1078	Connors Bros (NB) Heritage S - Lake Utopia	St John R	Smolt	Y	15,000	Private	Aquaculture (Unspecified)
1071	Connors Bros (NB) Heritage S - Lake Utopia	St John R	Eggs	Y	800,000	Private	Aquaculture (Unspecified)
1080	Digdequash hatchery (NB)	St John R	Smolt	Y	72,000	Private	Aquaculture (Unspecified)
1075	Huntsman Marine Lab. (NB)	St John R	Smolt	Y	4,200	Private	Brood Stock Dev.
1079	Chamcook-ASF (NB)	St John R	Smolt	Y	5,000	Private	Brood Stock Dev.
1086	Digdequash hatchery (NB)	St John R	Smolt	Y	100,000	Private	Aquaculture (Unspecified)
1081	Connors Bros (NB) Heritage S - Lake Utopia	St John R	Fry	Y	320,000	Private	Aquaculture (Unspecified)
1091	Aqua Health Ltd (PEI)	St John R	Smolt	Y	2,000	Research/Educ.	Research/Education
1085	Huntsman Marine Lab. (NB)	St John R	Eggs	Y	6,000	Research/Educ.	Research/Education
1073	Qualtiy Fish Farm (NB)	St John R	Parr	Y	1,000	Research/Educ.	Research/Education

BROOK TROUT

1089	Pisciculture St Damien (QUE)		Eggs	Y	25,000	Private	Aquaculture (Unspecified)
1076	Ecosystem Science (NFLD) GMNP Rocky		Eggs	Y	6,000	Research/Educ.	Research/Education

RAINBOW TROUT

1072	Trout Lodge (WA)	All Female	Eggs	Y	220,000	Private	Aquaculture (Unspecified)
1069	Trout Lodge (WA)		Eggs	Y	600,000	Private	Aquaculture (Unspecified)
1092	Trout Lodge (WA)		Eggs	Y	600,000	Private	Aquaculture (Unspecified)
1077	Trout Lodge (WA)		Eggs	Y	400,000	Private	Aquaculture (Unspecified)

ONTARIO

RAINBOW TROUT

1055	Troutsprings (WA)		Eggs	Y	100,000	Private	Aquaculture (Unspecified)
1058	Troutsprings (WA)		Eggs	Y	300,000	Private	Aquaculture (Unspecified)
1062	Troutsprings (WA)		Eggs	Y	450,000	Private	Aquaculture (Unspecified)
1053	Troutsprings (WA)		Eggs	Y	150,000	Private	Aquaculture (Unspecified)
1057	Troutsprings (WA)		Eggs	Y	400,000	Private	Aquaculture (Unspecified)

Friday, May 30, 2003

File #	Facility Of Origin	Stock/Strain	LifeStage	Reprod.	Number Shipped	Receiving Facility Type	Planned Use
1050	Pisciculture Alleghanys (QUE)		Eggs	Y	56,000	Private	Aquaculture (Unspecified)
1059	Troutsprings (WA)		Eggs	Y	300,000	Private	Aquaculture (misc. inland)
1066	Troutsprings (WA)		Eggs	Y	500,000	Private	Aquaculture (Unspecified)
1065	Troutsprings (WA)		Eggs	Y	100,000	Private	Aquaculture (Unspecified)
1060	Troutsprings (WA)		Eggs	Y	300,000	Private	Aquaculture (Unspecified)
1054	Troutsprings (WA)		Eggs	Y	700,000	Private	Aquaculture (misc. inland)
1061	Troutsprings (WA)		Eggs	Y	120,000	Private	Aquaculture (Unspecified)
1056	Troutsprings (WA)		Eggs	Y	250,000	Private	Aquaculture (Unspecified)
1051	Troutsprings (WA)		Eggs	Y	340,000	Private	Aquaculture (misc. inland)
1052	Troutsprings (WA)		Eggs	Y	272,000	Private	Aquaculture (Unspecified)
1063	Troutsprings (WA)		Eggs	Y	300,000	Private	Aquaculture (Unspecified)

PRINCE EDWARD ISLAND

ARTIC CHAR

1231	Pisciculture Alleghanys (QUE)	Sex Reversed	Adults	N	0	Private	Aquaculture (Unspecified)
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ATLANTIC SALMON

1230	Stofnfiskur Ltd. (ICE)	Mowi	Eggs	Y 50% triploid	100,000	Private	Research - Brood Stock Dev.
1232	Merlin Fish Farms (NS)		Adults	Y	2,000	Private	Brood Stock Dev.
1233	Connors Bros (NB) Heritage S - Lake Utopia		Smolt	Y	400	Private	Bio-monitoring

RAINBOW TROUT

1229	Trout Lodge (WA)		Eggs	Y	75,000	Private	Aquaculture (FW pen)
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QUEBEC

BROWN TROUT

1228	McKenzie Fish (MIN)	Unknown	Fry	Y	10,000	Private	Aquaculture (Unspecified)
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Friday, May 30, 2003

File #	Facility Of Origin	Stock/Strain	LifeStage	Reprod.	Number Shipped	Receiving Facility Type	Planned Use
<u>RAINBOW TROUT</u>							
1223	Trout Lodge (WA)	Unknown	Eggs	Y	140,000	Private	Aquaculture (Unspecified)
1226	Trout Lodge (WA)	Unknown	Eggs	Y	60,000	Private	Aquaculture (Unspecified)
1224	Trout Lodge (WA)	Unknown	Eggs	Y	120,000	Private	Aquaculture (Unspecified)
1227	McKenzie Fish (MIN)	Unknown	Fry	Y	5,000	Private	Aquaculture (Unspecified)
1225	Trout Lodge (WA)	Unknown	Eggs	Y	40,000	Private	Aquaculture (Unspecified)

Friday, May 30, 2003