

Salmon HACCP Plan
(Hazard Analysis and Critical Control Point)

Pittsford National Fish Hatchery, VT
Atlantic and Landlocked Salmon Smolt Production

Updated 2/27/03

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1. Product Description

Firm Name:	Pittsford National Fish Hatchery
Firm Address:	4 Holden Road North Chittenden, VT 05763
Species of fish:	Atlantic and Landlocked Atlantic Salmon (<i>Salmo salar</i>)
Cultured, wild harvested, or both:	Cultured
Harvest method:	Net from raceway
Method of distribution and storage:	Truck Distribution
Intended use and consumer:	Public waters for species restoration and fishing

2. Flow Diagram

Step 1	Eggs are received in November
Step 2	Fry are moved to rearing troughs inside nursery
Step 3	Feeding fry are moved to circular tanks inside nursery
Step 4	Fingerlings are moved to outside raceways in Spring or Summer
Step 5	Salmon are fed, cleaned, and monitored for next ten or twenty months
Step 6	Smolts are harvested into distribution trucks in April
Step 7	Smolts are stocked into receiving waters.

3. Potential Hazards

List aquatic species here that are found in hatchery water supply or local waters that could potentially hitchhike to receiving waters and cause ecological harm. These are called *Aquatic Nuisance Species* (ANS).

- a. **ANS Fish:** brook trout, brown trout, rainbow trout, and slimy sculpin.
- b. **ANS Other Vertebrates:** Spotted salamander.
- c. **ANS Invertebrates:** Aquatic insects, one species of gastropod.
- d. **ANS Plants:** None.

4. Hazard Analysis Worksheet

(1) Harvest or Aquaculture Step	(2) Identify potential ANS hazards introduced or controlled at this step (1)	(3) Are any potential ANS hazards significant? (Yes/No)	(4) Justify your decisions for column 3.	(5) What preventive measures can be applied to prevent the significant hazards?	(6) Is this step a critical control point? (Yes/No)
1) Eggs are received from other hatcheries.	Fish	No	Not possible	n/a	No
	Other Vertebrates	No	Not possible	n/a	No
	Invertebrate	No	Eggs are disinfected with iodine treatment	n/a	No
	Plant	No	“	n/a	No
2) Fry are moved to rearing troughs in nursery	Fish	No	Fry are hatched in nursery,	n/a	No
	Other Vertebrates	No	an ANS free environment	n/a	No
	Invertebrate	No	on well water or sterilized	n/a	No
	Plant	No	brook water.	n/a	No
3) Feeding fry are moved to circular tanks inside nursery	Fish	No	“	n/a	No
	Other Vertebrates	No	“	n/a	No
	Invertebrate	No	“	n/a	No
	Plant	No	“	n/a	No
4) Fingerlings are moved to outside raceways in Spring or Summer	Fish	No	Evolutions do not	n/a	No
	Other Vertebrates	No	involve possible	n/a	No
	Invertebrate	No	introduction of ANS	n/a	No
	Plant	No	“	n/a	No
5) Salmon are fed, cleaned, and monitored for the next ten or twenty months	Fish	Yes	ANS may only be introduced via flooding which results in	None	No
	Other Vertebrates	Yes	ANS bypassing the filtration	“	No
	Invertebrate	Yes	and disinfection system.	“	No
	Plant	No	n/a	n/a	No
6) Smolts are harvested into distribution trucks in April	Fish	No	ANS could be present	Use proper mesh size net to	Yes
	Other Vertebrates	No	in raceways as per step 5	grade out smaller ANS.	Yes
	Invertebrate	No	“	Visually pick out larger ANS.	Yes
	Plant	No	“	“	Yes
7) Smolts are stocked into receiving waters.	Fish	No	“	n/a	No

	Other Vertebrates	No	“	n/a	No
	Invertebrate	No	“	n/a	No
	Plant	No	“	n/a	No
	Fish				
	Other Vertebrates				
	Invertebrate				
	Plant				
	Fish				
	Other Vertebrates				
	Invertebrate				
	Plant				

5. HACCP Plan Form

(1) Critical Control Point (CCP)	(2) Significant Hazard(s)	(3) Control Measures	Monitoring				(8) Corrective Actions(s)	(9) Records	(10) Verification
			(4) What	(5) How	(6) Frequency	(7) Who			
6) Smolts are harvested into distribution trucks in April	Fish, invertebrates, amphibians	Use largest mesh size net that is practical. Remove any ANS seen during harvest	Ensure that nets allow escape of small ANS, and hand-pick larger ANS	Equipment preparation and visual alertness during harvest	Before and during harvest	Hatchery employee	Sort with larger net if existing one is inadequate	Records of ANS to be kept in Log book.	Hatchery Manager to review records and ensure that measures are taken

Firm Name:	Pittsford National Fish Hatchery	Species of Fish: Atlantic and Landlocked Atlantic Salmon
Firm Address:	4 Holden Road North Chittenden, VT 05763	Method of Storage and Distribution: Indoor tanks, outdoor raceways, and distribution truck
Signature:	/s/ Stephen C. Jackson	Intended Use and Consumer: Restoration and recreational fishing
Date:	27 Feb, 2003	