

**TUTKA BAY LAGOON HATCHERY
ANNUAL REPORT
2008**

Cook Inlet Aquaculture Association
Gary Fandrei, Executive Director
December 2008

This year's operation of the Tutka Bay Lagoon Hatchery was made possible through enhancement taxes paid by commercial salmon fishermen in Area H, Cook Inlet and associated waters, the harvest and sale of surplus fish and a grant provided by Senator Ted Stevens administered through the National Oceanic and Atmospheric Administration and the Alaska Department of Fish and Game.

ABSTRACT

Reports such as this one covering the operations of the Tutka Bay Lagoon Hatchery are prepared annually for each hatchery the Cook Inlet Aquaculture Association (CIAA) operates and are submitted to the Alaska Department of Fish and Game.

Such reports cover a calendar year (report year) and, thus, address overlapping fish brood years.

This report covers events during calendar year 2008.

Schedule A data deal with eggs collected during the report year – 2008.

No eggs were collected in 2008. The pink salmon release program has been suspended.

No sockeye salmon program dedicated to this facility is currently conducted, and no sockeye eggs were collected for this facility in 2008. The facility is being used to temporarily rear and release sockeye salmon smolts for a Trail Lakes Hatchery Program. See Trail Lakes Hatchery Annual Report Schedule A for egg collections for this release program.

Schedule B data deal with fish released during the report year – 2008.

No pink salmon fry were released in 2008. The pink salmon release program has been suspended.

No sockeye salmon program dedicated to this facility is currently conducted, and no sockeye salmon were released for this facility in 2008. The facility is being used to temporarily rear and release sockeye salmon smolts for a Trail Lakes Hatchery Program. See Trail Lakes Hatchery Annual Report Schedule B for release data for this release program.

Schedule C data deal with fish harvested in the common property fisheries; fish used for broodstock and fish harvested for cost recovery revenues during the report year – 2008.

No stocked pink salmon adults returned in 2008. The pink salmon release program has been suspended.

No sockeye salmon program dedicated to this facility is currently conducted and no adult sockeye for this facility returned in 2008. The facility is being used to temporarily rear and release sockeye salmon smolts for a Trail Lakes Hatchery Program. See Trail Lakes Hatchery Annual Report Schedule C for return data for this release program.

Schedule D data project the total adult return for the coming year – 2009.

No stocked pink salmon adults are projected to return for the coming year 2009. The pink salmon release program has been suspended.

No sockeye salmon program dedicated to this facility is currently conducted and no adult sockeye for this facility are projected to return in 2009. The facility is being used to temporarily rear and release sockeye salmon smolts for a Trail Lakes Hatchery Program. See Trail Lakes Hatchery Annual Report Schedule D for projected return data for this release program.

Schedule F data are presented only when information reported in the prior year's annual report needs to be corrected or updated.

There were no corrections or updates made to the 2007 data entries; however, as directed by the Alaska Department of Fish and Game, CIAA plans to review all previous fish releases from this facility during the upcoming year. The Tutka Bay Lagoon Hatchery 2008 Annual Report will be updated when this information becomes available.

INTRODUCTION

The Tutka Bay Lagoon Hatchery is owned by the State of Alaska and operated by CIAA and is located across Kachemak Bay from Homer. Operations at the hatchery have been suspended except for temporary rearing of Trail Lakes Hatchery sockeye salmon smolt in the lagoon net pen complex.

The Tutka Bay Lagoon Hatchery operates under Private Non-Profit Permit #32 issued in 1994 and has a current permitted capacity of 125.0 million pink salmon eggs and 0.660 million sockeye salmon eggs. The Fish Transport Permits (FTP's) under which CIAA operates the programs of the Tutka Bay Lagoon Hatchery are as follows:

Permit Number	Expiration Date	Activity
00A-0073	12/31/10	Collection of pink salmon eggs from Tutka Bay Lagoon. Incubate, rear, and release up to 125.0 million fry. Twenty percent of fry must be released to Tutka Bay Lagoon. Remaining fry can be released within 1 mile of Tutka Bay Lagoon.
06A-0095	06/30/10	Transport of up to 0.5 million sockeye salmon presmolt to Tutka Bay Lagoon. Reared and released as smolt.

ANNUAL REPORT

SALMON HATCHERY

Year Ended December 1, 2008

Hatchery name/Location
Permit holder name/Address

Tutka Bay Lagoon Hatchery
Cook Inlet Aquaculture Association
40610 Kalifornsky Beach Road
Kenai, AK 99611-6445

Person to contact
regarding this report

Gary Fandrei
(907) 283-5761

name
phone

DECLARATION AND SIGNATURE

I declare that the information given in this annual report is, to my knowledge, true, correct and complete.

Gary Fandrei

Name of Legal Representative

12/16/2008

Date

Signature of Representative

Part 1. REPORT OF THIS YEAR'S PERFORMANCE

A. Complete the following schedules of production statistics for this year. Use the metric system for length and weight measurements.

- Schedule A- Annual Broodstock Report
- Schedule B- Fish Culture Report
- Schedule C- Harvest Management and Hatchery Returns

If this site is a central incubation Facility, complete a separate schedule for each remote release site.

Part 2. PROJECTED RETURNS FOR NEXT YEAR

A. Complete Schedule D for each species and each release site.

Part 3. UPDATED SCHEDULES FOR PRIOR YEAR ANNUAL REPORT ARE MANDATORY

A. Updated schedule C (called F) is attached. Please update the information we have on file, if changes have occurred or numbers have been finalized.

SCHEDULE A-1

ANNUAL BROODSTOCK AND INITIAL SURVIVAL REPORT

**Tutka Bay Lagoon
Hatchery**

Complete this schedule for each species/ stock of eggs taken this year.

1. Species						
2. Stock (donor stream name/number)						
3. Viable broodstock (spawned, eggs in incubators)		female s		male s	-	total
4. Inviabile broodstock (green/over-ripe/bad)		female s		male s	-	total
5. Unspawned fish (roe recovery, excess males)						
6. Holding mortalities (raceway, pen mortalities)						
7. Adults captured for broodstock (sum 3 thru 6)	-					
8. Average length and weight of adults used for broodstock						
	females>		cm		kg	
	males>		cm		kg	
9. Average fecundity (eggs/female)						
10. Eggtake dates:						
11. Number of green eggs taken						
12. Number of eggs transferred (annotate below)						
13. Number placed in hatchery ¹						
14. Number surviving to eyed						
				#DIV/0!	% survival ²	

15. Describe procedures used for egg takes and evaluation of in-hatchery survivals:

Regular salmon egg collections were suspended in 2004. This facility provides short-term rearing resources for a Trail Lakes Hatchery Hidden Lake stock sockeye salmon project.

1. Provide explanation if greater than number of green eggs taken.

2. Provide explanation for survivals less than 90%.

SCHEDULE B-1

ANNUAL FISH CULTURE PRODUCTION REPORT

Complete this schedule for each species and stock of eggs (or fish) cultured this year from prior broodyears. Please provide explanations for any differences in reported numbers of green eggs and eyed eggs from those reported last year by species and stock.

FISH CULTURE REPORT

Tutka Bay Lagoon Hatchery

Species: **Socketeye** Stock: **Hidden Lake** Brood year: **2006**

A. Lifestage Information

	Actual number	% cum survival	Transfers- between hatcheries (annotate)
1. Green eggs		100.0 %	
2. Eyed eggs		#DIV/0!	
3. Emergent fry		#DIV/0!	
4. Fed fry		#DIV/0!	
5. Smolts	500,000	#DIV/0!	Smolts transferred from TLH to TBLH April 8, 2008

B. Release Information

Site	Number	Release		Size		Expected adult return	Year(s) of return
		date	lifestage	gm/fi sh	mm/fi sh		
Tutka Bay	483,000	6/12/2008	smolts	14.5		48,300	2010 & 2011

Total: 483,000

C. Tagging/Marking

6. Number of fish marked or tagged (by release group and method of marking)

D. Other

7. Report any diseases, rearing problems, or significant mortalities among these fish.

This facility provides short-term rearing resources for a Trail Lakes Hatchery Hidden Lake
stock sockeye salmon project. Hidden Lake sockeye release information is presented in the
Trail Lakes Hatchery Annual Report and is not fully addressed in the Tutka Bay Lagoon Hatchery
Annual Report.

SCHEDULE C-1

HARVEST MANAGEMENT AND HATCHERY ADULT RETURNS

Complete a separate schedule for each project and species.

Tutka Bay
Lagoon
Hatchery

Species:
Location of harvest/return:

Hatchery Escapement

1. Cost recovery fish (Sch. C sum of lines 16A,16B,16C) traditional harvest plus roe and milt recovery fish
2. Adults captured for broodstock (Sch. A line 7) minus roe and milt recovery fish (Sch. C lines 16B and 16C)
3. Escapement for hatchery watershed (as required in permit)
4. Jacks
5. Other ¹ (annotate in comments section)
6. Other ¹ (annotate in comments section)
7. Other ¹ (annotate in comments section)

-
-

8. Total return to hatchery

Common Property Harvest

9. Commercial ²

- A. Troll
- B. Gillnet
- C. Seine
- D. Other (annotate in comments section)

Total commercial

-

10. Non-commercial ²

- A. Sport
- B. Personal Use
- C. Subsistence
- D. Other (annotate in comments section)

Total non-commercial

-

-

11. Total Return (sum 8,9,10)

	BY	Total # returning in 2008	Cumulative Survival	
12. Estimated ocean survival by BY 2				%
				%
				%
				%
				%
				%

13. Average size of fish sold		<length-cm		wt-kg
14. Date(s) of harvest				
15. Gear type or method used				

16. Disposition of Hatchery Escapement

	# fish	lbs. fish
A Fish harvested/sold		
. adults		
jacks		
total	-	-

	# fish	lbs. roe/milt
B . Roe recovery	-	
C . Milt recovery	-	

	# Disposed	# Donated	# Sold
D . Carcasses			
Spawners			
Roe recovery (during eggtake)			
Roe recovery (non-eggtake)			
Milt recovery (during eggtake)			
Milt recovery (non-eggtake)			
Other (annotate in comments)			
total number of fish	-	-	-
total pounds			

Comments:

This facility provides short-term rearing resources for a Trail Lakes Hatchery Hidden Lake stock sockeye salmon project. Hidden Lake sockeye

return information is presented in the Trail Lakes Hatchery Annual Report and is not fully addressed in the Tutka Bay Lagoon Hatchery Annual

Report.

1. "Other" use one line per category. (e.g. fish remaining in saltwater, sea lion predation, etc.).

2. **Commercial harvest, non-commercial harvest, and estimated ocean survival. Provide method used in estimation.**

SCHEDULE D
PROJECTED RETURNS FOR 2009

Species	Release Site	Total number of fish expected	Range in expected return	
			minimum	maximum
This facility provides short-term rearing resources for a Trail Lakes Hatchery Hidden Lake stock				
sockeye salmon project. Hidden Lake sockeye return information is presented in the Trail Lakes				
Hatchery Annual Report and is not fully addressed in the Tutka Bay Lagoon Hatchery Annual				
Report.				

SCHEDULE F-1

UPDATED 2007 HARVEST MANAGEMENT AND HATCHERY ADULT RETURNS

Complete a separate schedule for each project and species of fish with updated numbers from last year's annual report.

If there are no changes to the data write in "no changes from 2007 AR" at the bottom of the form.

Species:
Location of
harvest/return:
n:

Tutka Bay
Lagoon
Hatchery

Hatchery Escapement

1. Cost recovery fish (Sch. F sum of lines 16A,16B,16C) traditional harvest plus roe and milt recovery fish
2. Adults captured for broodstock (Sch. A line 7) minus roe and milt recovery fish (Sch. F line 16B and 16C)
3. Escapement for hatchery watershed (as required in permit)
4. Jacks
5. Other ¹ (annotate in comments section)
6. Other ¹ (annotate in comments section)
7. Other ¹ (annotate in comments section)

-
-

8. Total return to hatchery

Common Property Harvest

9. Commercial ²

- A. Troll
- B. Gillnet
- C. Seine
- D. Other (annotate in comments section)
- Total commercial**

-

10. Non-commercial ²

- A. Sport
- B. Personal Use
- C. Subsistence
- D. Other (annotate in comments section)
- Total non-commercial**

-

11. Total Return (sum 8,9,10)

-

	BY	Total # returning in 2007	Cumulative Survival	
				%
12. Estimated ocean survival by BY ²				%
				%
				%
				%
				%
				%

13. Average size of fish sold <length-cm wt-kg

14. Date(s) of harvest

15. Gear type or method used

16. Disposition of Hatchery Escapement

	# fish	lbs. fish
A Fish harvested/sold adults		
jacks		
total	-	-

	# fish	lbs. roe/milt
B Roe recovery	-	
C Milt recovery	-	

	# Disposed	# Donated	# Sold
D Carcasses			
Spawners			
Roe recovery (during eggtake)			
Roe recovery (non-eggtake)			
Milt recovery (during eggtake)			
Milt recovery (non eggtake)			
Other (annotate in comments)			
total number of fish	-	-	-
total pounds			

Comments:

No changes from the 2007 Annual Report

1. **"Other" use one line per category.** (e.g. fish remaining in saltwater, sea lion predation, etc.).
2. **Commercial harvest, non-commercial harvest, and estimated ocean survival. Provide method used in estimation.**