



SALMON & STEELHEAD
ENHANCEMENT SOCIETY

Attn: Barry Finnegan / Blair Holtby, PBS, Nanaimo
Brenda Donas / Henry Ragetli, DFO, Smithers
Dave Peacock / Les Janz, DFO, Prince Rupert
Walter Joseph, Wet'suwet'en Fisheries, Moricetown
Don Baily / Hans Galesloot, DFO, Vancouver

06/11/00

Re: Coho Escapement through the Toboggan Creek Counting Fence in 2000

Up to and including Saturday, November 4th the Toboggan Creek coho fence count stands at 3,352 fish. The panels on the fence were removed this morning and the count for 2000 is complete. A total of just 8 coho were sampled and passed above the fence in the last seven days. The fence count ended up as second highest over the past 12 years.

The numbers of coho moving dwindled even though flows were quite high during the past week, indicating the run is over. Hatchery coho accounted for 62.5 % of the coho handled in the past seven days, and overall they comprised 40.4 % of the spawners upstream of the fence. No more coho are evident at the Bulkley / Toboggan confluence.

We captured only one previously-tagged coho during the past week, for a total of 296 tagged coho from the Moricetown study. Of these 296 tags recovered we observed a total of 119 that were tagged at the fishway and another 177 that were tagged in the seine fishery. We saw five untagged tail-punched coho at the fence this fall, representing 1.7% of the marks. The condition of previously-tagged salmon was very good overall.

Overall, the fence count went very well this year. We tagged every fifth coho handled which will enable an estimate of any fish that may have gone past uncounted. We also conducted four walks of the entire spawning grounds, including the area downstream of the fence. Preliminary indications are that only five to six percent of the total run spawned downstream of the fence, and that a similar number passed upstream of the fence without being sampled. The total coho stock is likely to be 3,700 to 3,800 coho for 2000. We will put out a final estimate once all data have been compiled and reviewed.

Mike O'Neill, Manager

ESCAPEMENT SUMMARY ATTACHMENT (2000)

Toboggan Coho (839)

Estimate of spawners u/s of fence - 3,352 coho were sampled at the fence, of which 670 were tagged, and we carried out a Petersen estimate of spawners upstream by doing four walks of the entire spawning area from October 11th to November 1st. We estimated the total spawning stock above the fence at 3,620 (M=636, C=3,250, R=571).

Estimate of spawners d/s of fence - based on 5.5% estimate of stock proportions below fence, this was also as a result of the four walks of the entire spawning area.

Estimate of angler catch of coho - based on harvest (53) and of catch and release mortalities of five percent (12) indicated by a creel survey funded by Fisheries Renewal BC in 2000.

Estimate of native catch of coho - based on tagging mortalities associated with coho tagging study at Moricetown, funded by DFO (3,000 tagged x 0.25 Toboggan stock component x 0.05 mortality rate) indicates 38 mortalities of Toboggan coho.

ESCAPEMENT SUMMARY FORM

Prepared: 09-Mar-01

TOTAL RETURNS TO RIVER FOR : 2000 Toboggan Creek Colo Summer-run Page 1
839

	Unknown Adults	Males	Females	Total Adults	Jacks	Inmatures
FISH REMOVED FROM THE SYSTEM						
Number of fish taken for brood stock		48	12	60		
Number of fish given to natives (not including brood stock carcasses)				0		
Number of fish sold for surplus (not including brood stock carcasses)				0		
Number of mortalities and/or fish used for other purposes				0		

	Unknown Adults	Males	Females	Total Adults	Jacks	Inmatures
TOTAL NATURAL SPAWNING POPULATION ABOVE FENCE						
Number sampled for marks and released		1,716	1,576	3,292		
Number counted but NOT sampled for marks				0		
Additional fish estimated to pass above fence (during periods when fence not operated etc.)		171	157	328		
+ Total Hatchery staff estimate of above fence spawners	0	1,887	1,733	3,620	0	0
Other Branch / Agency estimate of above fence spawners				0		

	Unknown Adults	Males	Females	Total Adults	Jacks	Inmatures
TOTAL NATURAL SPAWNING POPULATION BELOW FENCE						
Number sampled for marks and released				0		
Number counted but NOT sampled for marks	250			250		
Additional fish estimated below fence				0		
+ Total Hatchery staff estimate of below fence spawners	0	110	100	210	0	0
Other Branch / Agency estimate of below fence spawners				0		

	Unknown Adults	Males	Females	Total Adults	Jacks	Inmatures
ESTIMATED FRESH WATER SPORT FISHERY (IF APPLICABLE)						
+ Total Hatchery staff estimate of sport fishery		34	31	65		
Other Branch / Agency estimate of sport fishery				0		

	Unknown Adults	Males	Females	Total Adults	Jacks	Inmatures
ESTIMATED NATIVE FISHERY (IF APPLICABLE)						
+ Total Hatchery staff estimate of native fishery		20	18	38		
Other Branch / Agency estimate of native fishery				0		

INDICATE METHODS USED TO ESTIMATE POPULATION.
(IF COMMENTS ARE REQUIRED, PLEASE USE REVERSE)

X				Fence, Fishway, flashboard or tower (Continuous Count- 24 hrs /day)
				Fence, fishway, flashboard or tower (Interpolated Count < 24hrs / day)
X				Petersen estimate
				Index by Redd count, peak count, dead pitch, floats, helicopter, etc.
	X			Visual estimate from brood stock collection, walks or spotchecks, etc.
		X	X	Other method - Use reverse or space below to describe.

PLEASE STAPLE

COMPLETE FOR EACH STOCK

ESCAPEMENT SUMMARY FORM

COMPLETE FOR EACH STOCK AND STAPLE

Prepared: 09-Mar-01

SAMPLING INFORMATION FOR :

2000 Toboggan Creek

Coho

Summer-run

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SAMPLE: 839

- Hatchery Swim-Ins
- Channel Dead Pitch
- Live +
- Dead - Salt Water
- Estuary
- Fresh Water
- + Lake
- + River
- + Above Fence
- + Below Fence
- + At Fence
- + Total Count
- + Partial Count

	Unknown Adults	Males	Females	Total Adults	Jacks	Immatures
NUMBER OF FISH COUNTED (at trap or fence if appropriate)		1,764	1,588	3,352		
NUMBER OF FISH EXAMINED FOR MARKS		1,764	1,588	3,352		
NUMBER OF C.W.T. MARKS FOUND		642	703	1,345		
NUMBER OF other MARKS FOUND		4	5	9		
NUMBER OF HEADS REMOVED FOR TAG DECODING		113	137	250		
NUMBER OF HEADS DISSECTED FOR TAGS		113	137	250		
NUMBER OF LOST OR MISSING HEADS						

(recorded as NO-DATA by the Head Lab)

F ANGLING OR NETTING, ARE LIVE FISH RETURNED TO THE RIVER SAMPLED FOR MARKS BEFORE RELEASE

YES NO

F YES, ARE RELEASED FISH MARKED TO PREVENT DOUBLE COUNTING?

(If released fish are not marked, describe the method used to obtain a representative mark rate. Use reverse if necessary.)

YES NO

ARE RECAPTURES A SIGNIFICANT PORTION OF FISH EXAMINED FOR MARKS?

YES NO

NUMBER OF ADIPOSE CLIPS RECORDED AS:

	Unknown Adults	Males	Females	Total Adults	Jacks	Immatures
No data 500000				0		
Cut short 600000				0		
Unreadable 700000				0		
No pin 800000				0		
Lost pin 900000				0		
Subtotal	0	0	0	0	0	0