

STREAM SURVEYS

Barren Creek (Slide Creek) ADF&G No. 102-70-73

INTRODUCTION

Location: Barren Creek is located on the east central portion of Prince of Wales Island. (55° 44' N. Latitude and 132° 29' W. Longitude)

Description: The stream averages 20' wide and 6" deep up to the main fork which is 2.3 miles from salt-water. Velocities range from swift to gentle with several lengthy stretches of swift velocities. The stream bed consists of generally coarse gravels averaging 10 cm. in diameter. Stream bed stability is good but any major disturbance could easily trigger massive bedload movement because of the velocity characteristics of the stream.

History: Salmon escapement records are lacking on this stream but escapements have been observed to be very low. Coho fry are abundant and observed up to Wilder Lake.

The area has been logged along the entire length of the stream with very little disturbance that would affect the salmon production. Improper leave areas have created blowdown problems in two areas. One area has been taken care of by logging the blowdown in 1971.

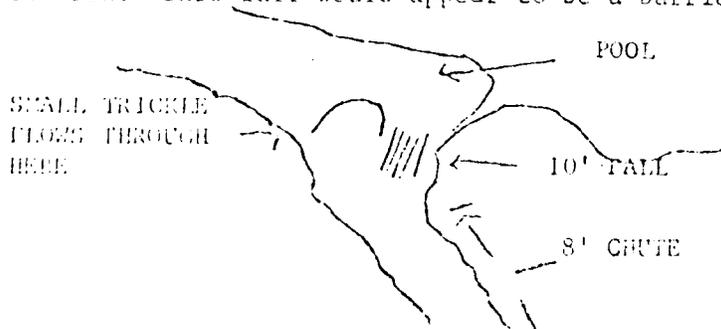
The remaining leave area is probably in the most critical section of the stream and is fraying at this time.

Stream Survey: (See attached map)

Approximately 1000' upstream from salt-water, Barren Creek passes through a 1500' gorge that creates a partial velocity barrier to pink salmon. In addition, the gravel below this gorge is extremely coarse (10 - 20 cm. in diameter) and is poor for spawning.

Above this gorge for 3900' to a series of small falls, the stream has excellent spawning areas with a high frequency of resting pools that are up to 10' deep and 20 - 30 feet wide.

The series of small falls is a 7' drop in elevation over an 80' run and would not be a salmon barrier. Upstream 500' from this spot is a 10' fall over a 10' run. This fall would appear to be a barrier to salmon. (See sketch below)



probably not to maximum capacity. Modification of the two falls on the main fork would cost approximately \$35,000 with a potential return of \$1,700 in coho production.

Recommendations: I would recommend that first priority for stream enhancement be given to logging the leave area where we are receiving the blowdown. This area is above the 10' falls 7000' upstream from salt-water. Logging this would require yarding logs across the stream and up steep embankments that would create siltation downstream. But the area downstream is utilized very little by pinks and probably by fewer coho.

The 10' falls seem to be only a partial barrier to the coho and modification would require three sections of aluminum steep-pass. Since the area above the stream is already supporting a good number of coho, the falls modification should be avoided because of the maintenance costs for a small increased return.

Two debris jams are on the fork to Wilder Lake. These jams are not barriers but have potential and should be cleaned out. Since the streambank in these two areas are poorly defined, I believe a cat could be used quite effectively in cleaning these out at a cost of less than \$200. Hand cleanup would be costly.

APPENDIX

(Maps)

Daniel H. Stacey

PRI

PRINCE OF WALES ISLAND

1100 ROAD

Clara
Stca

LT Norton
Cabin

101-109

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