

# **GRIDS AND KNOTLESS BUNTS UPDATE**

**February 1, 2005**

After five years of development and testing grids and knotless bunts, the data and results will be reviewed in a PSARC paper. (currently due May 2005). This paper will review the work from each year, re-examine the evolution of the gear, assess the conservation benefit and attempt to make a case for a prescription that could be implemented. This paper may also consider or provide advice related to implementation, costs and recommendations for further research.

**The priority conservation issues being addressed, at this time, by this gear are:**

1. Area 20 and the high mortality rate on coho (70% and potential for high incidence)
2. Area 3 and 4 high mortality on immature chinook and coho

**The results to date have been very compelling and it is believed that grids in combination with knotless bunt web can do the following:**

- Allow the escape from the bunt of a high percent of immature salmon (e.g. coho, chinook, etc.)
- Allow the in-water escape of by-catch (believed to significantly reduce the mortality rate on those fish passing through the grids)
- Reduction in the number of by-catch requiring sorting and release from on deck
- Significant reduction in overall by-catch mortality through in-water sorting, reduced gilling and scaling
- Flexible grids and the knotless web function very well with existing seine operations:
  - Operates well with the spooling gear
  - Power skiff not required but can improve the performance of the gear
  - Can withstand the strain of big sets, beach tie-offs, strong currents and wear and tear
  - Future implementation could result in only one bunt being required coast-wide (i.e. an extra strip for Area 20) and the estimated cost of the bunt and grids is approximately \$8000 per vessel

It is likely the PSARC paper will highlight the need to assess the mortality rates on salmon that escape the grids and compare this new gear application to conventional gear. It is logical to assume that if this paper strongly endorses the conservation benefits of this gear and a prescription implemented, that refinements could be made over time to improve its application and results.

**What could be considered for work in 2005 in preparation for potential larger scale implementation in 2006 (large sockeye run in north and south) in specific areas (Note: 6 bunts currently available and the deadline for ordering material for a season is the middle of February):**

1. Mortality assessment in Areas 3, 4 and 20
2. Further refinements to the gear
  - a. Bunt mesh size and thickness
  - b. Grid size and thickness of material

**Other potential future applications of this gear combination may include:**

- Sorting and release of small or large non-target species:
  - Release of pinks in First Nation's sockeye fisheries
  - Release of Area 6 pinks from hatchery chums in Douglas Channel
  - Retention of Fraser pinks while releasing Fraser sockeye
  - Release of smaller size endangered stocks mixed with larger stocks