

Table 3. Simulation of two potential mixtures of juveniles using 66 GAPS populations as a baseline (13 loci). Parametric values for proportional contributions are given for each reporting group, followed by the estimate generated through simulation (Ranalla and Mountain 1997). The first simulation (A) represents a 50% U.S. and 50% Canadian stock mix. The second simulation (B) represents a mix of 80% U.S. and 20% Canadian stocks.

A.

Reporting Unit	Actual composition	Estimated composition (n= 50)	SD
United States	0.500	0.482	0.071
Canada	0.500	0.515	0.071
South Puget Sound	0.100	0.110	0.430
Whidbey Basin	0.240	0.224	0.061
North Puget Sound	0.050	0.048	0.032
Juan de Fuca	0.060	0.055	0.031
Washington Coast	0.050	0.046	0.028
South BC Mainland	0.020	0.019	0.021
East Vancouver Island	0.050	0.054	0.033
Lower Fraser	0.080	0.081	0.044
Lower Thompson	0.040	0.039	0.026
South Thompson	0.060	0.065	0.036
North Thompson	0.040	0.039	0.031
Mid Fraser	0.100	0.106	0.046
Upper Fraser	0.040	0.042	0.028
West Vancouver Island	0.070	0.073	0.034

B.

Reporting Unit	Actual composition	Estimated composition n=50 fish	SD
United States	0.800	0.799	0.059
Canada	0.200	0.201	0.059
South Puget Sound	0.250	0.254	0.063
Whidbey Basin	0.360	0.347	0.068
North Puget Sound	0.050	0.047	0.032
Juan de Fuca	0.090	0.103	0.045
Washington Coast	0.050	0.049	0.031
South BC Mainland	0.100	0.098	0.044
East Vancouver Island	0.000	0.003	0.007
Lower Fraser	0.100	0.097	0.041

Lower Thompson	0.000	0.000	0.000
South Thompson	0.000	0.001	0.006
North Thompson	0.000	0.000	0.002
Mid Fraser	0.000	0.001	0.003
Upper Fraser	0.000	0.001	0.003
West Vancouver Island	0.000	0.000	0.003

References

Ranalla, B, and JL Mountain. 1997. Detecting immigration by using multilocus genotypes. Proceedings of the National Academy of Sciences USA 94:9197-9201.