



"Revolutionary advances are being made in the study of salmon" according to Brian Riddell, President of the non-profit [Pacific Salmon Foundation](#), when he spoke at the Cedars Inn in Gibsons on March 25.

The most recent and exciting scientific initiatives involve smolt tagging and genomics.

Smolt Tagging

Smolt tagging research is currently underway. Very tiny auditory tags have been developed. These auditory biological markers will show the linkage between microbes and host immunity of smolts en route to the ocean. The marked smolts can also be tracked throughout the Strait of Georgia by sensors on underwater cables laid at both ends of the Strait. The University of Victoria announced on March 25 that they will soon be laying a second cable north of Campbell River.

Genomic Research

The second and most dramatic announcement of the evening was the four-year twenty million dollar project in [genomic research](#) called the Salish Sea Marine Survival Project. The Pacific Salmon Foundation has drawn together thirty-seven partners from industry, First Nations and universities in Canada and the U.S.A. to support this scientific research.

Just as the use of DNA in human research made a great leap forward in scientific understanding of animals so has the human genome project led to the promise of amazing advances in learning by studying animal genomes. Genomic signatures can predict the salmon migration and spawning results in micro arrays. A micro array of genetic information from salmon could result in as many as 32 thousand assays per day showing the microbial health and origin of salmon.