



Shrinking Fry - Why? - A 2005 Toyota Tapestry / NSTA Classroom Grant Project

The Toyota Tapestry program was a long-standing teacher grant program administered by the National Science Teacher's Association that offered classroom teachers the opportunity to propose a unique research opportunity for their students - with a \$10,000 grant awarded to 50 national winners every year. Allan Miller was awarded one in 2005 for a project called Shrinking Fry - Why? that proposed partnering with several local fish and game biologists on the Kenai Peninsula in Alaska to explore why they were seeing a significant decrease in both the size and number of sockeye salmon fry in several of the spawning rivers in our schools area.

This was probably my favorite year of teaching ever - as the funds primarily went to fund field research. My class went on over 50 field trips that year as they learned to do basic water testing - looking at turbidity, salinity, pH and other possible indicators to add to the scientists data for the research. We also studied the fry's primary food supply - macroinvertebrates and learned to capture and identify them as is shown in the picture above. We even partnered with another University of Alaska Fairbanks study looking at the depth of lake and river ice - getting out in the middle of Alaska winter for some very memorable data collection snowshoeing expeditions. Our research added to the data pool that has identified that it is likely that the continuing challenge to salmon fry viability is the increasing amount of glacial silt and freshwater being added to the headwater lakes all of which are connected to several glacial systems.