

AFSC/ABL: Genetic stock identification of sockeye salmon captured near Unalaska Island – 1998

Chuck Guthrie

This study is part of the Auke Bay Laboratory's Ocean Carrying Capacity (OCC) which has extensively sampled salmon in the North Pacific since 1996 to obtain information on marine life history and migration patterns. Genetic stock identification techniques (protein electrophoresis) indicated that Bristol Bay stocks of immature sockeye salmon (*Oncorhynchus nerka*) made up the largest percentage in two samples taken near Unalaska Island in 1998. The substantial numbers of immature sockeye salmon captured at Cape Cheerful during May 1998 were unexpected, based on current migration models of western Alaska sockeye salmon. Immature sockeye constituted the largest percentage of our immature salmon catch captured at Cape Prominence during August 1998. This was also unexpected since immature chum salmon (*O. keta*) were the predominant catch during August 1996 and 1997 at the same location. These unexpected events may be due to changes in distribution resulting from the strong El Niño event during 1997-1998.