

Oceanographic conditions along the northern Gulf of Alaska's Seward Line, 1997-2008

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The Seward Line in the Northern Gulf of Alaska has been the focus of multidisciplinary sampling for the past 11 years. Here we report on the observations of physical oceanography, nutrients, phytoplankton, and zooplankton over that period. In particular, we discuss the biological conditions during 2007 and 2008 when spring temperatures have been lower than observed over the past decade. During both years, the spring bloom was delayed, as was the development of the zooplankton community dependant upon it. Under these conditions some key zooplankton species have done better than average, while others have not. Specifically, biomass during May of the key copepod species *Neocalanus plumchrus/flemingeri* was lower than average in 2007. Implications to higher trophic levels will be discussed. Notably, 2008 returns of pink salmon released in 2007 showed low survival compared to other years.