

This presentation will outline an ongoing project to examine the prohibited species catch (PSC) avoidance behavior of catcher processor vessels in the Bering Sea flatfish fisheries under the current regulatory system of PSC and target quotas and spatial closures. The purpose of this research is two-fold. First, we will examine the often perverse and contradictory incentives created by the existing regulatory system. Preliminary results from a simple game-theoretic model reveal that (for a sufficient numbers of vessels) PSC quotas create substantial incentives for “dirty” fishing, leading to high bycatch rates and premature regulatory closures. These findings compare favorably to the observed history of the flatfish fisheries. Second, we examine the success of a bycatch control system implemented in 1995 under which fishermen voluntarily conveyed spatial bycatch information to each other so that informed efforts to avoid bycatch might be facilitated. Superficial analysis suggests the program had limited and somewhat mixed success; however, these findings are confounded by contemporaneous closures of large fishing grounds. We propose an econometric model of fishing ground choice that allows us to separate the incentives created by the program from the observed outcomes while hopefully illuminating the complex and potentially confounding interplay between multiple regulatory instruments."