**Using PIT tags to evaluate the post-release survival of spring chinook salmon following their capture in commercial gear**

C. Ashbrook, J. Skalski, K. Yi, R. Townsend, J. Dixon and E. Schwarz

The concept of commercial Selective Fishing was tested for adult spring chinook salmon (*Oncorhynchus tschawytscha*) on the Columbia River for three years. Jaw tags were applied all three years to obtain a post-release survival estimate. On the third year, PIT tags were also applied. This was done because PIT tags were expected to be detected at higher rates than jaw tags and would therefore produce a more precise survival estimate. Experienced gill-netters used modified fishing techniques and the following parameters were recorded: catch efficiency, immediate and long-term survival, and bycatch. Captured fish were released and PIT tag detection occurred at dams and hatchery racks and traps. Jaw tag recovery occurred in succeeding fisheries, at hatchery racks and traps, and during spawning ground surveys. Control fish were tagged and released from an adult trap in Bonneville Dam, just upstream of the fishing area. The comparison of the post-release survival estimates generated by PIT and jaw tags will be presented.