Speed and Survival Rate of Oncorhynchus nerka Migrating from the Pacific Ocean

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Before dams were built on the Columbia and Snake rivers, thousands of Sockeye Salmon would migrate from the Pacific Ocean to their breeding grounds at Redfish Lake in central Idaho. Now that eight dams stand in their way, the number of fish has decreased dramatically. If the Sockeye Salmon do not make it to Redfish Lake, they are unable to reproduce. This could result in little or no fish in the upcoming years. It was intriguing to see how many of the Sockeye Salmon actually survive all the way to their spawning grounds. After looking at thousands of already recorded data points from PIT tagged Sockeye Salmon and sorting them into smaller groups, these groups were used to see if the hypothesis could be accepted or not. The hypothesis being, Sockeye Salmon beginning their migration early in the year, and proceeding through the 8 dams to Redfish Lake the quickest, will have a higher survival rate than those leaving later in the year and arriving later to Redfish Lake. It was concluded that the Sockeye Salmon who left earlier in the year had the highest survival rate of 62%, and the fish swimming through the dams at a medium speed had the highest survival rate. This data can be used to help the dam corporations know what they need to do to help the Sockeye Salmon reach Redfish Lake.

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