PTAGIS: The First 20 Years

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This year, 2011, marks the 20th anniversary of the inception of the PIT Tag Information System (PTAGIS) to manage the Columbia Basin's PIT tag mark/detection event data. The use of PIT tags for research and monitoring projects has expanded steadily since 1991, not only in the numbers of fish tagged, but also in the scope of projects relying on PIT tags, the diversity of species marked with PIT tags, and the number of locations throughout the Basin where PIT tag release and recapture events occur. Similarly, PIT tag interrogation activities have expanded from their original focus on the detection of salmon smolts at dams in the main-stem Snake and Columbia rivers. PIT tag interrogation systems now audit the passage of tagged salmon and steelhead during both their smolt and adult migrations at these and other dams, the departure and return of these fish to hatchery facilities, and the movements of salmon and other species at numerous in-stream detectors in tributaries throughout the Basin. PIT tag recoveries and recapture activities provide additional opportunities to observe changes in the condition of individual tagged host fish. These disparate events are correlated using a simple but robust model that allows researchers to monitor the disposition of millions of individual PIT-tagged fish within and beyond the Columbia Basin.

PTAGIS software verification tools promote the accuracy of PIT tag mark/release and recapture events as they are recorded. The rigorous adherence to a standardized data dictionary, enforced by the client software as well as the database server, guarantees that all data values are correctly and consistently incorporated into the PTAGIS database. PTAGIS provides immediate, comprehensive, and transparent access to the complete set of PIT tag data reported from throughout the Columbia Basin during the last 25 years.