

Pilot Study, Using PIT tags to monitor movements of Kuskokwim River Whitefish

Passive Integrated Transponders (PIT) tags were surgically implanted in 3 broad whitefish *Coregonus nasus*, 84 least cisco *C. sardinella*, and 38 humpback whitefish *C. pidschian* to test their use for monitoring whitefish movements using flat panel antenna systems. Tagged fish were released between two antennas and 78% of the tags were detected passing either upstream into the lake from the release location or downstream. An unexpected 17% of all tagged fish moved down stream and 13% were detected by both antennas. Of the 22% that were not detected, 37% were released the day before or the day of an equipment malfunction. The maximum read distance above the antenna that a fish could be detected was 45 cm. Results indicate this technology is applicable to assess movements of individual whitefish in remote sites.

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