Kuskokwim River In-season Harvest/Effort Sensitivity Analysis

6/19/2021 Subsistence Harvest Opportunity (Drift & Set Nets)

Opportunity Time Period: 6:00 AM - 6:00 PM (12 Hours) Area Covered by Estimates: Tuntutuliak \longleftrightarrow Akiak

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Special Action #: 3-KS-02-21

Special Action: https://www.fws.gov/uploadedFiles/2021_fisheries_3-KS-02-21_Final_6.17.2021.pdf







Effort Sensitivity Analyses

In the tables below, "Pr(F1|F2)" is the probability that a trip counted on flight 2 was also counted on flight 1 (the estimator corrects for double-counting; this column will not display if only one flight was made). "Trips per interview" is an estimate of how many actual trips occurred per interview that was conducted, and is used to expand the effort estimate for interviews that are known to have occurred but could not have been counted because they started and stopped during times when the flights were inactive. "Trips not observed" is the estimated number of trips that fall in this expanded category.

Exclusion of Flight Data

This analysis leaves out all combinations of flight data and re-calculates the drift net effort estimates. This helps give a sense of how the estimate would have been different had fewer flights been conducted. Generally, you want to see small changes because with good interview data coverage, the effort estimator should be robust to fewer flights. If there are large changes (e.g., >50%), that indicates that the distribution of fishing effort indicated by the interview data and the flight data are inconsistent, and emphasizes that conducting several flights within an opportunity is important to obtain a good estimate.

Scenario	Effort Estimate	% Change	Pr(F1 F2)	Trips Per Interview	Trips Not Observed
F1, F2	511	0%	80%	2.26	20
F1	523	2%	_	2.31	86
F2	437	-14%	_	1.94	166