# Kuskokwim River In-season Harvest and Effort Estimates

6/4/2022 Subsistence Harvest Opportunity (Set Nets Only)

Opportunity Time Period: 6:00 AM – 10:00 PM (16 Hours) Area Covered by Estimates: Tuntutuliak  $\leftrightarrow$  Akiak Announcement #: 3-KS-01-22







### **Data Sources**

**TABLE 1.** The number and percent of fisher interviews conducted by location and organization.

Data Source	Interviews	Percent
Other Villages (BSFA/KRITFC)	21	64%
Bethel Boat Harbor (ONC)	9	27%
Bethel Area Fish Camps (ONC)	3	9%
Total	33	100%

 TABLE 2. The time each flight was conducted and fishers counted each flight.

Time Information			Nets Counted		
Start Time	End Time	Hours	Drift	Set	
1:55 PM	3:33 PM	1.63	0	75	

## **Effort Estimates**

• An estimated **75** total set net trips occurred.

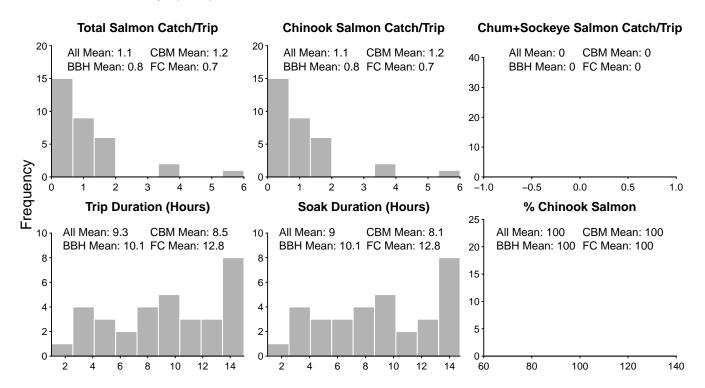
#### **Harvest Estimates**

- An estimated total of 80 (40 130) salmon were harvested.
  - An estimated total of 80 (40 130) Chinook salmon were harvested.
  - An estimated total of 0 (0 0) chum salmon were harvested.
  - An estimated total of 0 (0 0) sockeye salmon were harvested.

**TABLE 3.** Summary of relevant quantities by river stratum (area) for set nets. Numbers in parentheses are 95% confidence intervals.

Stratum	Interviews	Effort Est.	Chinook	Chum	Sockeye	Total
Tuntutuliak $\longleftrightarrow$ Johnson R.	1	4	0 (0 – 10)	0 (0 – 0)	0 (0 – 0)	0 (0 – 10)
Johnson R. $\longleftrightarrow$ Napaskiak	7	12	10 (10 – 20)	0 (0 – 0)	0 (0 – 0)	10 (10 – 20)
Napaskiak $\longleftrightarrow$ Akiachak	25	49	50 (30 – 80)	0 (0 – 0)	0 (0 – 0)	50 (30 – 80)
Akiachak - Akiak	0	10	10 (10 – 20)	0 (0 – 0)	0 (0 – 0)	<b>10</b> (10 – 20)
All	33	75	<b>80</b> (40 – 130)	0 (0 – 0)	0 (0 – 0)	80 (40 – 130)

**FIGURE 1.** Distributions of relevant quantities from all completed trips using set nets. The mean quantity by primary data source is shown in the top right; BBH = Bethel Boat Harbor (ONC), CBM = Other Villages (BSFA/KRITFC), FC = Bethel Area Fish Camps (ONC).



#### **Appendix A: Non-salmon Harvest Information**

• An estimated total of 160 (90 – 260) non-salmon (sheefish and whitefishes) were harvested.

- An estimated total of 40 (20 70) sheefish were harvested.
- An estimated total of **120 (60 210)** whitefishes were harvested.

**TABLE A1.** Summary of relevant quantities by river stratum (area) for set nets. Numbers in parentheses are 95% confidence intervals.

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Stratum	Interviews	Effort Est.	Sheefish	Whitefishes	Total
Tuntutuliak $\longleftrightarrow$ Johnson R.	1	4	0 (0 – 0)	10 (0 – 10)	10 (0 – 10)
Johnson R. $\longleftrightarrow$ Napaskiak	7	12	10 (0 – 10)	20 (10 – 30)	<b>30</b> (10 – 40)
Napaskiak $\longleftrightarrow$ Akiachak	25	49	30 (10 – 40)	80 (40 – 140)	100 (60 – 170)
Akiachak $\longleftrightarrow$ Akiak	0	10	10 (0 – 10)	20 (10 – 30)	<b>20</b> (10 – 30)
All	33	75	40 (20 – 70)	120 (60 – 210)	160 (90 – 260)

 TABLE A2. Summary of set net catch per trip of sheefish by fishing area.

Area	Ν	Min	25%	Mean	75%	Max
Tuntutuliak $\longleftrightarrow$ Johnson R.	1	2	2	2	2	2
Johnson R. $\longleftrightarrow$ Napaskiak	7	0	0	1	1	2
Napaskiak $\longleftrightarrow$ Akiachak	25	0	0	0	0	3
All	33	0	0	0	1	3

TABLE A3. Summary of set net catch per trip of whitefishes by fishing area.

Area	Ν	Min	25%	Mean	75%	Мах
Tuntutuliak $\longleftrightarrow$ Johnson R.	1	18	18	18	18	18
Johnson R. $\longleftrightarrow$ Napaskiak	7	0	1	2	2	3
Napaskiak $\longleftrightarrow$ Akiachak	25	0	0	1	1	4
All	33	0	0	1	2	18