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.

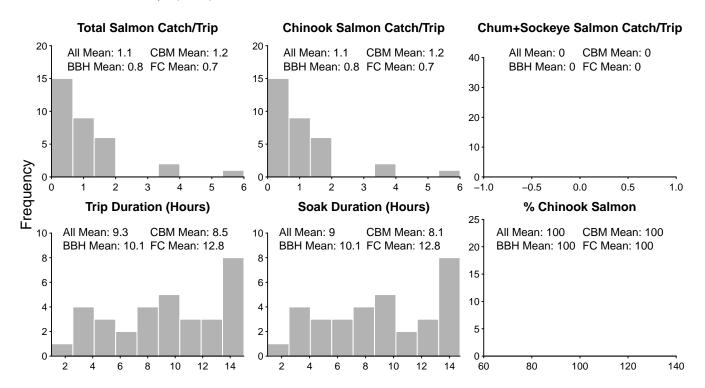
Harvest Estimates

- 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) | 10 (10 – 20) |
| All | 33 | 75 | 80 (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.

| | | | Es | st | |
|--|------------|-------------|-----------------|-------------------|------------------------|
| 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) | 30 (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) | 20 (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 |