

PERFORMANCE REPORT

STATE: Alaska

GRANT NO.: F-10-33

GRANT TITLE: Sport Fish Investigations in Alaska

PERIOD COVERED: July 1, 2017 - June 30, 2018

STUDY NO. AND TITLE: R-3-7b Kobuk River Sheefish

STUDY OBJECTIVES AND TASKS:

The purpose of Kobuk River sheefish studies, **R-3-7(b)**, is to enumerate outmigrating mature sheefish from the Kobuk River using sonar methodology.

Project objectives are to:

1. Use DIDSON sonar to enumerate the total number of mature sheefish outmigrating from the Kobuk River.

RESULTS/DISCUSSIONS:

Objective 1: In 2017, a large high water even prevented insonification of the Kobuk River entirely. Two sonar units were going to be placed into the Kobuk River, approximately 5 miles upriver from the village of Kobuk. The sonars record images 24 hours a day, 7 days a week from mid-September through mid-October or until the river ices up. Daily estimates of abundance are determined by counting target species in the first 20 minutes of each hour and expanding for the day. A post-season census produces a total spawning abundance. However, in 2017 consistent high water throughout the outmigration hindered our ability to put sonars in the water until after the majority of the outmigration had already occurred. In 2018, sonar methodology will still be used to enumerate sheefish but the DIDSON units have been upgraded to Adaptive Resolution Imaging Sonars (ARIS) that will allow us to insonify more of the river profile and at a better resolution.

FINAL REPORT STATUS:

All objectives will be addressed in a Fishery Data Series (FDS) report in 2019 following completion of the project. The Performance Reports will serve as annual progress reports until the final report is completed.

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DATE: September 1, 2018