

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: E-2-9 Survival of Recompressed Rockfish

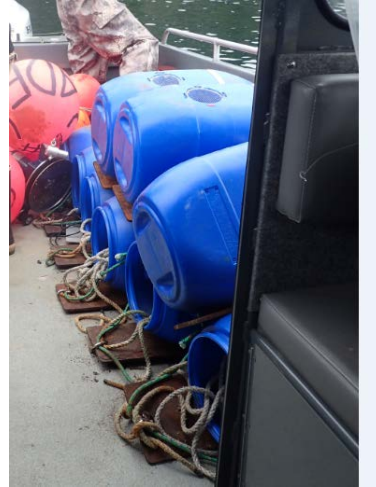
STUDY OBJECTIVES:

Develop species-specific models of discard survival rates of individuals released at depth (aka recompressed) as a function of capture depth, barotrauma, and size (total length).

RESULTS/DISCUSSIONS:

This study used a novel cage system designed by Hannah et al. (2012) to simulate deepwater release of 6 commonly caught rockfish species in Prince William Sound and to estimate their probability of survival post-recompression. In addition, this study also documented capture depth and 6 external signs of barotrauma that make up the impairment associated with recompression of hook-and-line captured non-pelagic and pelagic rockfish species. This study found the probability of survival of 6 rockfish species to be excellent and estimated a probability of survival $\geq 84\%$ when these fish were released at depth. In addition, barotrauma injuries were not a good sign of whether a fish would survive following recompression. Out of 185 rockfish species (non-pelagic and pelagic) used in this study, only 12 died after being held in cages at depth ≥ 35 m for 2-days.

Outreach materials used to educate anglers about deepwater release of rockfish were created by staff and put up in boat harbors and key access points around Prince William Sound. Outreach events occurred at different locations and in the field demonstrating the proper use of deep water release mechanisms. In addition, devices used to recompress rockfish were distributed to anglers at sportsman shows, the SF Info Center, and at individual events.



Cages used to hold rockfish for 2-day cage studies



Silvergray rockfish - initial capture



2-days after recompression in cage

FINAL REPORT STATUS:

This performance report constitutes the final report of activities for study E-2-09 during the F-10-33 reporting period.

Information will be available in the ADF&G Fishery Data Series Report "Post-recompression Survival of Rockfish in Prince William Sound" currently in prep.

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DATE: August 16, 2018