

M.S. Graduate Research Assistantship in Fisheries

University of Alaska Fairbanks, College of Fisheries and Ocean Sciences



Location: This position will be located in Juneau, Alaska, at the Juneau Fisheries Center of the University of Alaska Fairbanks.

Project Description: Sablefish (*Anoplopoma fimbria*) are one of the most valuable groundfish species harvested in Alaskan waters. An age and sex-structured integrated stock assessment model is used to estimate trends in biomass for this stock across time and management reference points. *The purpose of this project is to evaluate alternative methods and sources of information for developing fishery-dependent indices of abundance, to inform stock assessment.* Fishery catch and effort data are available from both vessel logbooks and fisheries observers. However, differences in reported catch-per-unit-effort (CPUE) have been observed among

these two datasets, when compared on a set-by-set basis. Student research will focus on identifying what factors such as year, region, or fishing vessel attributes, may contribute to differences in observed catch rates. Based on these findings, subsequent research efforts will focus on exploration and comparison of statistical methods for generating a robust and informative fishery-dependent index of abundance for the sablefish stock from these two sources of information.

Qualifications: A Bachelor's degree in fisheries, resource management, biostatistics, or a related field by September 2020 is required. The successful applicant will be highly motivated and creative; possess excellent writing and communication skills; have a background in fisheries, quantitative ecology, or statistics; and show a strong interest in quantitative methods and fisheries stock assessment. Ideally, the applicant should have experience programming in R or another language, but this is not essential.

Funding: We offer 2 full years of funding (tuition, stipend ~\$30k/year, and benefits). This research was funded through a cooperative agreement with the NOAA Alaska Fisheries Science Center.

Closing Date: Applicant review will begin Sept 25, 2020

Start Date: January 2021

To Apply: E-mail the following to Dr. Curry Cunningham (cjcunningham@alaska.edu): (1) cover letter describing why you wish to pursue a MS degree, your interest in the project, and qualifications; (2) CV or resume; (3) unofficial transcripts; and (4) contact information for *two* references. For consideration, you may also include an academic writing sample and an example R script highlighting your programming experience. Please contact Dr. Cunningham with any questions. *Information about UAF MS application:* <https://www.uaf.edu/cfos/academics/apply/>

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