

PROJECT TITLE

Assessing the status of an Antarctic fish breeding ground

PROJECT DESCRIPTION

The King Edward Research Station sits at the head of one of the Fjordic Bays on the east coast of the Sub-Antarctic Island of South Georgia. The fjord is a juvenile nursery ground for some of the Antarctic Notothenoid fish, particularly *N. rossii* and *N. coriiceps*. The research station at KEP conducted surveys of these two species in the nursery ground in the 1970's. When the station reopened in 2001 a comparable dataset was collected, using the same fishing techniques. Between those two time points, there have been several major disturbances to the ecosystem - industrial fishing in the 70's and 80's, the return of fur seals, and climate change. We aim to compare the data from the late 70's with the data from the early 2000's to investigate how the juvenile population has changed and how the diet has changed. The aim is to feed into South Georgia's Government and CCAMLRs (Committee for the Conservation of Antarctic Living Marine Resources) management of the fishery. The data from the 70's is in hand written notebooks and needs to be entered into excel into a format that is comparable with the data that is in an access database from the 2000s. The project involves guided data analysis and publication of the data. The KEP database is rich in data and the intern will be encouraged to incorporate links to other datasets to make the most of this opportunity. These include environmental measurements, marine mammal populations etc. We expect to support the intern to lead a peer reviewed publication, entering and analysing the data and then writing up the manuscript as first author.

SUGGESTED LENGTH – 6 months

JOB DESCRIPTION

The aim of the internship is to lead a peer reviewed paper investigating the changes in a key nursery ground for Southern Ocean fish species, particularly *Notothenia rossii*. This will be completed through comparisons of inshore catch and diet data from the 1970s and 2000s. The data will be entered into comparable datasets so that changes can be assessed over these 30 years.

The project will require working with BAS archives and the KEP fishery team (current and past) to collate and enter data, analyse these data and then prepare the data for publication. The intern will become familiar with the Sub-Antarctic through reviewing literature and discussions with the team, developing their knowledge and understanding of one of the world's climate change laboratories. The intern will be guided, where necessary, through the steps of manuscript preparation. We anticipate that the output will also be presented as a CCAMLR report, which will compare with similar publications for the, offshore, adult populations.

WHAT ARE WE LOOKING FOR?

The Intern should have some experience of reading scientific literature, data analysis, presentation and writing reports. However all of these skills will be improved during the internship.