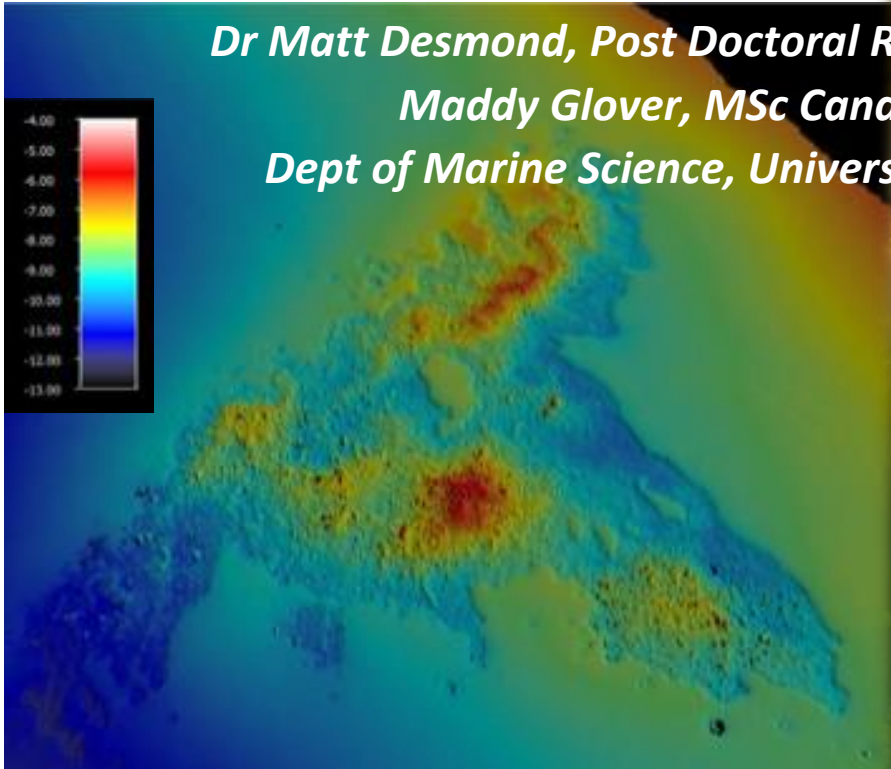
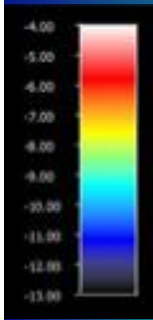


Habitat Mapping Using Multibeam Echosounder Technology

Dr Matt Desmond, Post Doctoral Research Fellow

Maddy Glover, MSc Candidate

Dept of Marine Science, University of Otago



M. Desmond:

The field of habitat mapping has grown considerably since the advent of advanced acoustic instrumentation *e.g.* multibeam echosounders (MBES). This equipment has provided an extremely high resolution insight into the physical structure of the seafloor and can provide valuable information which helps us understand the biological communities that inhabit these structures. Using MBES and ecological survey techniques we are creating habitat maps to aid in the management of customarily important fish stocks by better understanding the distribution of the habitats that support them.

M. Glover:

Anecdotal evidence describes the presence of large *Macrocystis pyrifera* (*M.pyrifera*) kelp forests along the southern Otago coastline which are now no longer present. Anecdotal evidence such as this has been shown to be important for inferring historical conditions when there are no long term data sets available. Natural fluctuations and disappearance of entire beds is not uncommon in well studied Californian kelp beds, however, it is important to determine if *M.pyrifera* forests along the Otago coast disappeared due to anthropogenic implications or if it is attributed to natural changes. By understanding the drivers of loss we are better informed to restore these once productive ecosystems. The use of MBES and geographic information systems (GIS) aids this.

School of
Surveying
Te Kura Kairāri

12:00 noon, Thursday, 12 September 2019

L1 Lecture Theatre

School of Surveying, 310 Castle Street

Join remotely: <https://otago.zoom.us/my/surveyingseminar>

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