



"But there is no consensus on the effect that harvesting Antarctic krill could have on atmospheric carbon and ocean chemistry nor, for that matter, how growing whale populations might also affect krill numbers.

"Southern Ocean ecosystems and chemical processes are highly complex and poorly understood, and our lack of knowledge about the extent of krill's ability to affect the carbon cycle is a concern, given that it is the region's largest fishery.

"We don't know, for example, whether a decline in krill might actually lead to an increase in the biomass of phytoplankton, which are also integral in transporting carbon to the seafloor.

"Conversely, a decline in krill would decrease the beneficial fertilisation effect that their faecal matter has on phytoplankton biomass, at the same time also jeopardising the important part krill play in circulating iron and other nutrients.

"Our study has shown there is a pressing need for further research to address these and other questions about the significance of krill, as well as for more accurate estimates of their biomass and distribution.