

ANTARCTICA

Exploration ICEBLOCK

(Exploration of Ice and Coastal Ecosystems of Benthic Life with
Outreach into Classrooms for Kids)

Trisha Korth

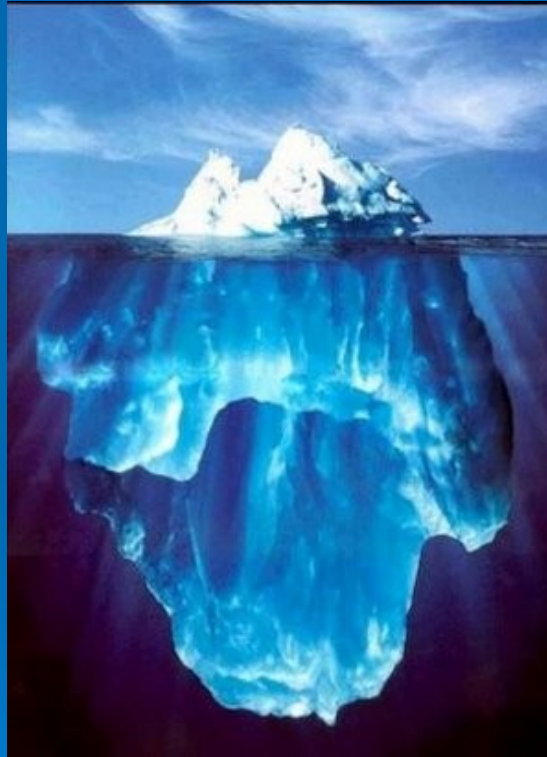
Primary Science Teacher Fellow 2009



When most people think of Antarctica they picture this:



Or this:



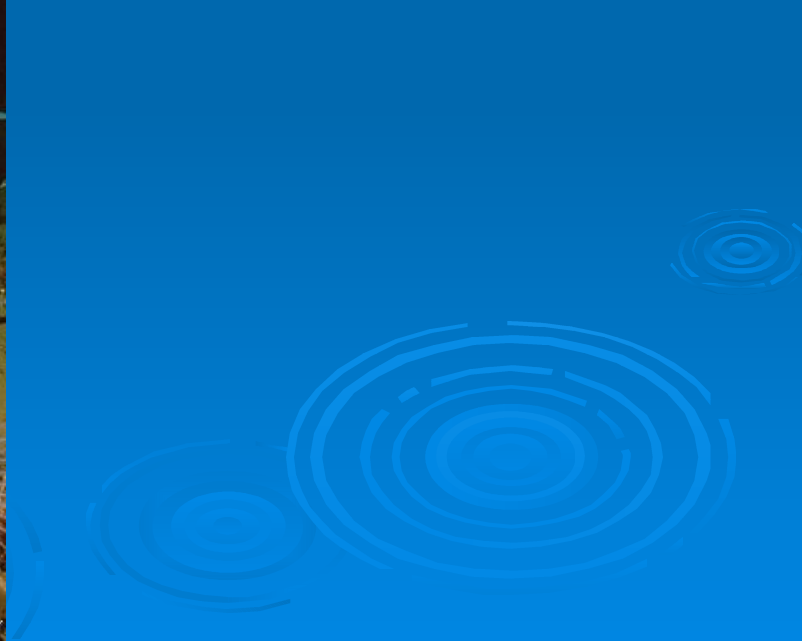
Or maybe even this:



➤ Antarctica the coldest, windiest, highest, and driest continent but what is it like under the sea ice?

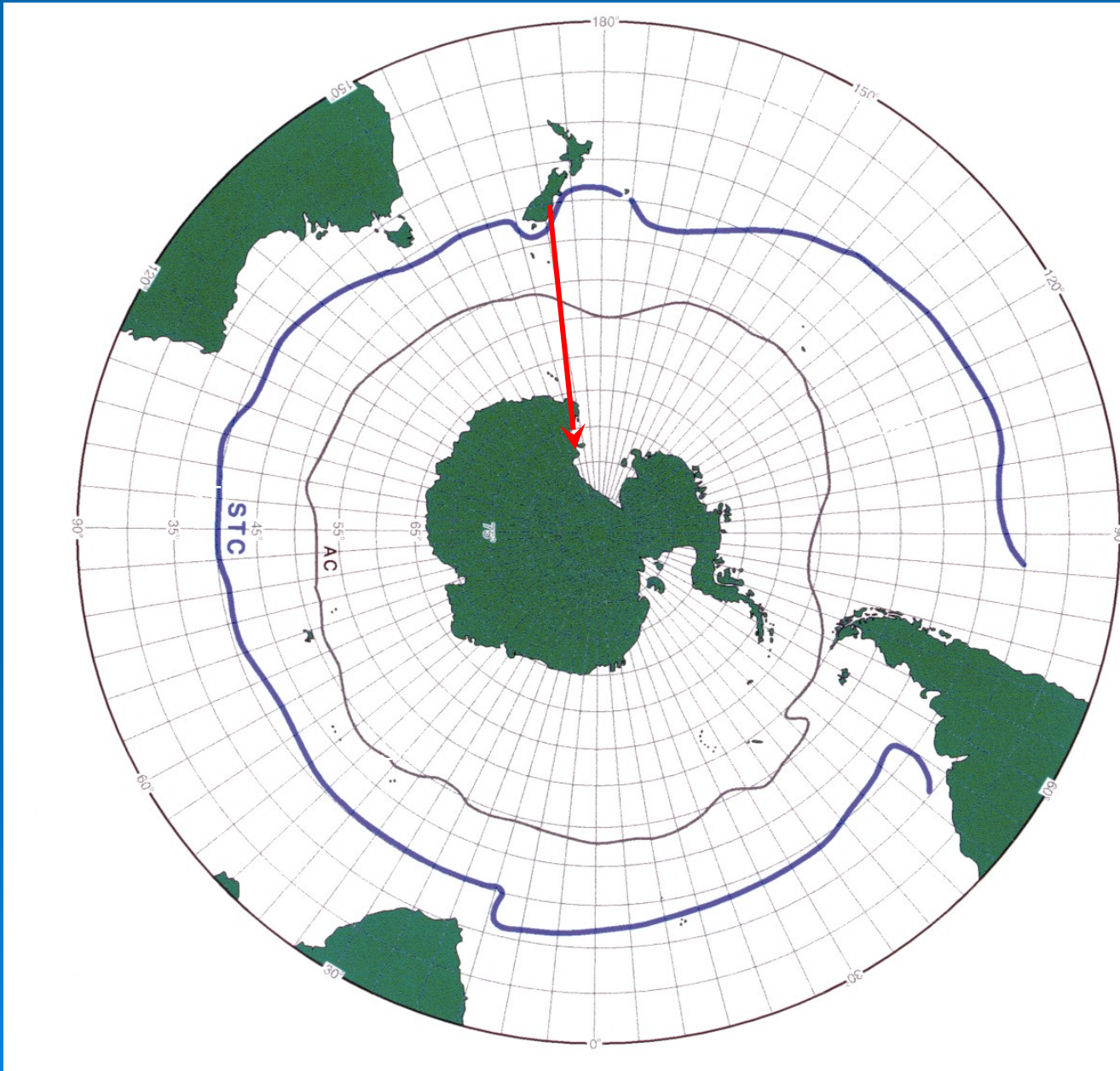


Photo: Andrew Tabor

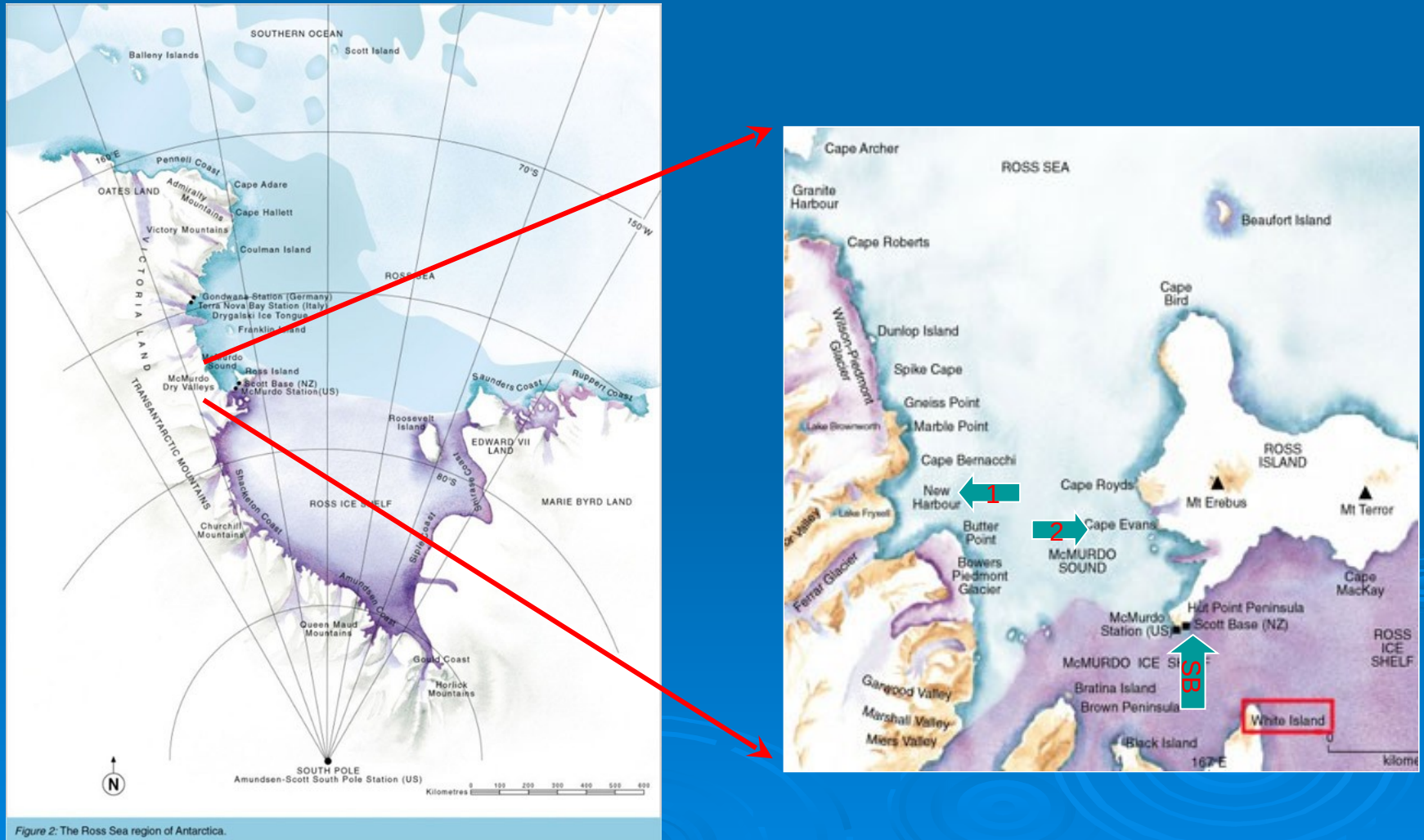


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A journey that begins from Christchurch, NZ to Scott Base, Antarctica



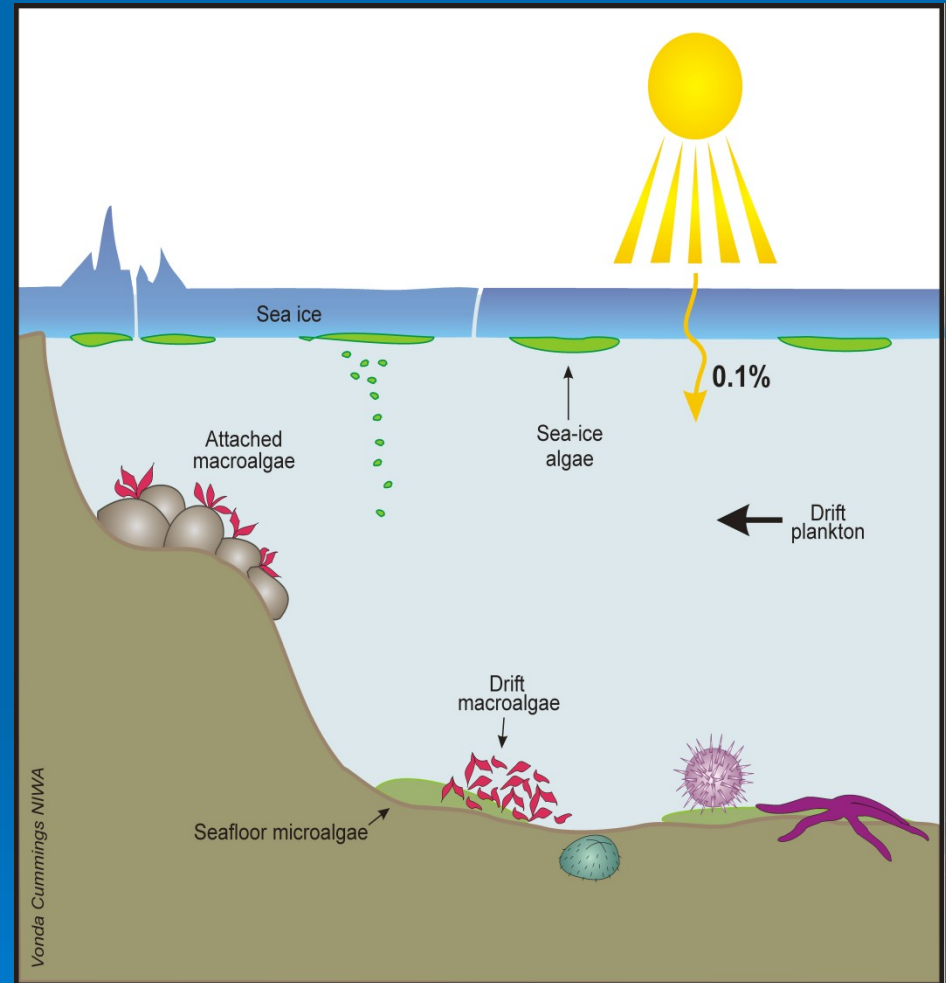
After basic safety training at Scott Base (SB) (including a night out in our own built igloo!), we will head across the Ross Sea ice to New Harbour (1) where we camp for 2-3 weeks and support the scuba divers who drop down a sea ice hole 6-7m deep to study the marine life on the sea floor! Then it's back to Scott Base with our scallop samples that will have to travel straight back to NZ for the ocean acidification experiment, and off to Cape Evans (2) for the rest of us to explore life under only 2m of sea ice this time!



- Under the Ross Sea ice lives an amazingly dense and diverse range of organisms, in one of the least modified coastal zones on earth.
- The coastal sea organisms are very slow growing and long lived e.g. some Antarctic shellfish live up to 80 years old. This makes them particularly vulnerable to changes in their environment, as populations are slow to recover or adapt.



- Sea ice dynamics inevitably have a major influence on the structure and function of these coastal seafloor communities.
- Surveys and sampling key organisms along the latitudinal gradient of the Ross Sea coast give researchers an understanding of these ecosystems.
- This scientific knowledge helps predict the impact of sea ice fluctuations, ocean acidification, fisheries and tourism on the benthic (sea floor) communities. This is important work in helping preserve this unique ecosystem.



Simple outline of Trisha's Educational Outreach programme on the Big Ice:

1. Photos, short video clips and 'chilly' entries from Antarctica onto a 'wikieducator' website which will be kept updated pre-ice trip, at Scott Base and hopefully from New Harbour (depending on internet access out on the field).
2. Communication via Satellite phone with a few select schools during the field camp out at New Harbour and audio conferencing from Scott Base.
3. Pre and post Antarctica visits to the schools involved, where children can ask their questions and be part of the whole exploration.
4. Exploration ICEBLOCK Science resources (activities and experiment ideas that can be used at different levels) on line via 'wikieducator' site, to do with Scott Base, New Harbour marine ecology field work, Cape Evans and other amazing explorations along the way!

Trisha's contact details:

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- Feel free to contact me with any questions or suggestions. If you've shown an interest to be involved, I will be in touch and keep you updated from my end.

