

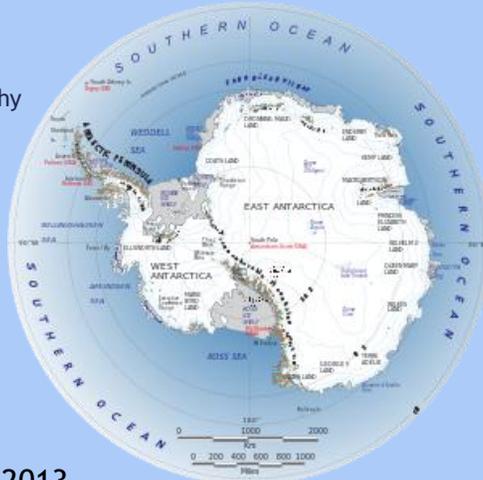
Aim of the Project

The aim of the project is to allow students to engage with the progress of the main expedition and to be inspired by the landscape, environment and research in Antarctica. We are aiming to conduct research of our own in parallel with the official expedition. We hope to receive information from the project that will enable our students to analyse groundbreaking scientific data at the forefront of cutting-edge science. We will be undertaking projects under the expedition's four research objectives. These wide-ranging headings allow for cross-curricular links between the expedition and many departments within the school and the students will have the opportunity to engage in activities from art projects to nutrition challenges and from digital mapping to chemical analysis. We will be documenting our work in a regular journal for pupils and parents.

Contributors:

Mr R Pletts, Head of Geography

Mr R Mundy, Biology



Next Session

Monday 25th February 2013

3.35 - 5.00pm Room 40

Test 1, Project 4: Social adaptation in cold environments - How are the team fuelling themselves for the physical challenge of the expedition
IN THE SPORTS HALL: BRING PE KIT

Produced by SGS Coldest Journey Club

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Session 3

Mapping Antarctica and Intro to Social Adaptation

Sutton Grammar School Presents:

Coldest Journey Club

Monday 11th February 2013

Background

Coldest Journey Expedition www.thecoldestjourney.org

Crossing the Antarctic during winter will provide a unique opportunity to collect key scientific data to further our understanding of the effects of climate change, and advance other important areas of research.

During the traverse, the expedition team will carry out a number of important tests which will include mapping the height of the landmass using new GPS techniques, sampling surface snow to establish patterns of large-scale atmospheric transport of water vapour across the ice sheet, and sampling for cryo-bacteria capable of withstanding the extreme cold conditions.

Sutton Grammar Club Related Aim for this week

Objectives:

- to continue research into the features of Antarctica and to propose a methodology for producing maps of the continent.
- to begin making the model that will be the base for the map.
- to introduce the idea of Project 4 (Social adaptation) by investigating the diet of the men trekking across the Antarctic.

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Session Plan

Cartography

We will be working with Art and DT to establish the best materials and methods for constructing our three-dimensional Antarctic model. Once this has been established, we will begin transferring researched data into a detailed model of the Antarctic land mass and ice sheet.

Research for mapping

We will be researching the features of the Antarctic. We will be considering sources of information and considering our aim for the maps that we produce.

Introduction to Social Adaptation - Diet

We will be introducing the idea of the diet required to fuel the men crossing the Antarctic. We will be trying some of the food and looking at the physical toll that the expedition will take, before trying to burn off a similar number of calories in the gym!

Expedition Latest Progress

The ice team members have now tested the equipment and are now moving up the ice shelf to the ice sheet at 5.5km/hr, in preparation for the start of the crossing on 21st March 2013

Photo, right © The Coldest Journey

