

what's
in the
box?



Tom Crean Box

Teachers' Guide



L O A N B O X P R O G R A M M E

Kerry County Museum, Ashe Memorial Hall, Denny Street, Tralee
T: 066 712 7777 • E: education@kerrymuseum.ie • W: www.kerrymuseum.ie

Claudia Köhler
Education, Community and Outreach Officer
Kerry County Museum
education@kerrymuseum.ie

Sarah O'Farrell
Collections and Documentation Officer
Kerry County Museum
collections@kerrymuseum.ie



An Roinn
Ealaíon, Oidhreacht agus Gaeltachta
Department of
Arts, Heritage and the Gaeltacht



CONTENTS

Introducing the Loan Box Programme	3
Aims and benefits of the scheme	4
Overview of box contents	5
Guidelines for handling the objects	6

Activity sheets

Flag and programme	7
<i>Brat agus clár</i>	8
Globe and maps	9
<i>Cruinneog agus mapáí</i>	10
Compass and sextant	11
<i>Compás agus seasamhán</i>	12
Ditty box and documents	13
<i>Bosca maingín agus cáipéisí</i>	14
Stone and photograph	15
<i>Cloch agus grianghraf</i>	16
Clothing	17
<i>Éadaí</i>	18
Antarctic daylight	19
<i>Solas an lae san Antartach</i>	20
How to make a barometer	21
<i>Baraiméadar. Conas é a dhéanamh</i>	22

Discover more about:

Antarctica	24
Surviving in the Antarctic	30
An Antarctic winter	38
Tom Crean	42

what's in the box?



Introducing the Loan Box Programme



Kerry County Museum's interactive Loan Box Programme is an important part of our education, community and outreach strategy. The boxes bring a little piece of the museum to the outside world as each contains artefacts and replica objects from the Museum's collections. We are providing pupils with a unique hands-on experience to actively discover and explore the past.

The boxes are aimed primarily, but not exclusively, for the use of primary schools in County Kerry. The 20th Century Box for example may also be used by other groups for reminiscence workshops.

This service, which has been funded by the Heritage Council, Kerry County Council and Tralee Town Council, is a new venture for the museum. We hope that the loan boxes will not only support and enhance the experience of the primary school curriculum for children but also prove to be a valuable educational tool for teachers and other educators. We believe that it will increase appreciation for our heritage, local history and the Museum.

As already mentioned, many of the items in the boxes are genuine artefacts. Some, for example the Stone Age arrowhead, are thousands of years old and it is imperative that the artefacts are treated with the utmost care. Please read the *Guidelines for Handling* (page 6) prior to using the box and complete the artefact inventory checklist when returning the box to the Museum.

We would also be grateful if teachers using the box in the classroom could complete an evaluation form. This will assist us in developing more loan boxes and classroom materials.

We hope you enjoy using the box and the resource materials with your group!

Claudia Köhler
Education, Community and Outreach Officer
education@kerrymuseum.ie



Aims and benefits of the scheme

AIMS OF THE LOAN BOX SCHEME

By introducing this service to schools in Kerry it is the aspiration of Kerry County Museum that a number of aims will be achieved:

- To allow schools and groups in the county of Kerry to borrow museum collections and to help children recognise the importance of primary sources.
- To provide support to the primary school curriculum through the use of museum artefacts in the classroom.
- To extend access to the museum collections and increase awareness of the role of the regional museum.
- Encourage children and parents to use the museum.



BENEFITS OF HANDLING PROGRAMMES

The loan box service at Kerry County Museum is a new undertaking for the museum. Handling programmes, which involve making objects in a museum accessible to the public, has been ongoing in many British museums for many years and has proven to be of immense benefit, to both young and old. Handling original objects gives users an enhanced experience of museum collections, with the senses of sight, hearing, smell and touch, all being used; removing physical and sensory barriers for everyone. Val Munday, referring to the experience of museums in Britain (2002, Guidelines for establishing, managing and using handling collections and hands on exhibits in museums, galleries and children's centres) has listed a number of the benefits associated with handling collections and loan services:

- It is an inclusive activity, breaking down barriers and encouraging group interaction.
- It has a proven track record in reminiscence work.
- Outreach of original objects through loan services allows people who may not be able to get to the museum, to appreciate objects and use them to support their learning.
- Access to real objects can play a powerful role in both stimulating and supporting learning. The curriculum emphasises the importance of using a variety of different sources and of introducing children to primary and secondary source material. The evidence suggests that attainment is raised and the learning of under-achievers is stimulated.

Overview of box contents

Each box contains: artefacts and replicas, activity sheets and information about the objects

PREHISTORIC BOX –

This box contains artefacts dating to the Neolithic and Bronze Age in Ireland. The artefacts include a stone axehead, flint arrowhead, three flint scrapers, a mining hammer and a bronze axehead. There is also a box with a number of pieces of unworked flint. A number of replica items are also included; a flint arrow, bronze axe, flat bronze axehead with handle and leather binding and a stone mould for casting bronze axeheads. These replica items can be handled freely and give opportunity

to experience the weight and uses of the objects.

It is hoped that the information included will provide the children with a context for the artefacts, by showing them how people lived in the Stone and Bronze Ages, the type of food that they ate and what type of houses they lived in etc. The realisation from the children's point of view should be that people in prehistoric Ireland depended on these types of tools for their very lives.

BALLINSKELLIGS CASTLE BOX –

Ballinskelligs Castle is the ruin of a tower house located on the Iveragh Peninsula, Co. Kerry. A rescue archaeological excavation at the site some years back yielded hundreds of artefacts and these provide the main focus for the loan box. The artefacts in the box include glass, pottery, bone, shell, and iron nails. Replicas of items that generally do not survive in an excavation context are also included, such as a pair of gentleman's leather gloves, clothes, a leather belt, leather boots, an arrow and two ceramic pots.

While the main focal point of the box is centred on Ballinskelligs Castle, the support information

accompanying the box provides information not only on the castle itself, but also on the arrival of the Anglo-Normans in the twelfth century and the beginnings of castle building in Ireland.

Information sheets in the booklet provide additional information on the finds e.g. the bone and shell come under 'Medieval food'. Other topics covered include 'Medieval pottery and glass', 'trading in medieval times', and 'clothes in medieval times'.

Similar to the Prehistoric box, there are question sheets for each of the artefacts.

TOM CREAN BOX –

The Tom Crean box is the most recent development in the highly successful 'What's in the Box' programme. Objects in the box include: facsimiles of original documents and letters; replica of Burberry outfit; modern examples of clothing suitable to be worn in Antarctica today; scientific instruments; a sailors ditty box; maps and a selection of books. The objects are presented in a box similar to a sailors chest and in

a sailors ditty bag.

The focus of the box is Tom Crean's own story, from growing up in Annascaul to his experiences in Antarctica. In addition the support materials look at Antarctic exploration then and now, and how scientific research in Antarctica contributes to our knowledge of the world.

Guidelines for handling the objects

Some of the objects contained in the loan boxes are original artefacts, which form part of the collections usually held in storage at Kerry County Museum. In loaning objects to schools and groups we wish to stress that their care is a priority, as these objects are irreplaceable. In order to ensure the safety and care of the objects, we should ask you to strictly adhere to following guidelines:

- *Designate one adult (teacher or group leader) who is responsible for the box and its content and that all guidelines are being followed*
- *Ensure box is only used under adult-supervision and is locked away in an appropriate storage area when not in use*
- *Ensure box and objects are not exposed to strong sunlight, excessive heat or damp*
- *Be aware that box might be heavier than it looks and ensure pupils use both hands to carry it*
- *Ensure box is always carried and stored in an upright position*
- *Ensure pupils wash their hands before handling objects*
- *Ensure pupils only handle objects using both hands and over a firm surface such as a table*
- *Ensure pupils do only handle one object at a time and do not walk around with objects unnecessarily*
- *Ensure pupils use pencils and not ink pens or markers when working with objects*
- *Ensure box is re-packed carefully after each session*
- *Please complete a check that all objects have been returned undamaged to the box*
- *Report damage, loss or theft of an object to the museum immediately. Please do not attempt to repair a damaged or broken object but ensure all broken pieces are retained*



Activity sheet 1

Flag and programme

Entertainment in Antarctica

During the long winter months in Antarctica Tom and his friends needed activities to pass the time. They filled their time by doing crafts, such as making flags, and organising a winter sports day

Copies of the front cover of a sports programme and a flag that Tom made for his sledge



- 1 Pick up the flag, look it over and answer the following questions
 - a. How does the material feel? (i.e. is it light, heavy or strong)
 - b. Where do you think Tom got the material?
 - c. What colour is the flag?
 - d. Do you think the material Tom used was always this colour or did he dye it?
 - e. Why would Tom have wanted his flag to be this colour?
- 2 Why do you think Tom put a 'Union Jack' on his flag? Why do you think he didn't put a 'Tricolour' on his flag? (Hint: when was the Irish 'tricolour' adopted?)
- 3 Draw a picture of the flag that you would make for your sledge in Antarctica. Don't forget to include symbols that are important to you. Discuss with your class why you chose the symbols.
- 4 Read the cover of the 'Programme of Sports' and answer the following questions.
 - a. What date did the sports take place?
 - b. What was the price of admission for a child?
 - c. How can you tell that the list of admission prices is supposed to be funny?
 - d. Where were drinks to be served?
- 5 The inside page of the Sports Programme is missing. Imagine you are on the committee to organise the 'Programme of Sports'. What sports would you include? Can you think of any sports that you might not be able to have in Antarctica?

Le linn míonna fada an gheimhridh san Antartach, bhí gá le siamsaíocht ag Tom agus ag a chairde. Do líonadar a gcuid ama ag plé le ceardanna, ar nós ag déanamh brat agus ag eagrú lae spóirt gheimhridh

Cóipeanna de chlúdach tosaigh ar chlár spóirt agus brat a dhein Tom dá charr sleamhnáin



- 1 Tóg suas an brat, scrúdaigh é agus tabhair freagra ar na ceisteanna seo a leanas:
 - a. Conas a mhothaíonn an t-ábhar? (i.e. an bhfuil sé éadrom, trom nó láidir?)
 - b. Cá bhfuair Tom an t-ábhar, dar leat?
 - c. Cén dath isea an brat?
 - d. An cheapann tú go raibh an dath seo riamh ar an ábhar a d'úsáid Tom, nó ar ruaimnigh sé é?
 - e. Cad ina thaobh go mbeadh an dath seo ag teastáil ó Tom ar a bhrat?
- 2 Cén fáth, dar leat, gur chuir Tom 'Brat Sasana' ar a bhrat féin? Cad ina thaobh nár chuir sé 'Brat na hÉireann' air? (Leide: Cathain ar ghlacadh le Brat na hÉireann?)
- 3 Tarraing pictiúr don mbrat a dhéanfaidh tusa do charr sleamhnáin agat féin san Antartach. Bí cinnte siombail atá tábhachtach duitse a chur ann. Mínigh don rang an fáth gur roghnaigh tú na siombail céanna.
- 4 Léigh an clúdach ar Chlár na Spóirt agus tabhair freagra ar na ceisteanna seo:
 - a. Cad é an dáta go raibh na spóirt ann?
 - b. Cén táille isteach a bhí ar leanbh?
 - c. Conas atá sé le tuiscint gur ábhar magaidh a bhí i liosta na dtáillí?
 - d. Cá raibh deochanna le bheith curtha ar fáil?
- 5 Tá leathanach láir Chlár na Spóirt in easnamh. Samhlaigh go bhfuil tú ar choiste eagraithe Chlár na Spóirt. Cad iad na spóirt a bhéas áirithe agatsa? An féidir leat cuimhneamh ar spóirt nach féidir a imirt san Antartach?

Activity sheet 2 | Globe and maps

Mapping Tom's adventures

Tom travelled around the world from Annascaul to Antarctica. Sailors, like Tom, found maps very important. One of the aims of the expeditions to Antarctica was to improve the maps for future explorers



- 1 Unfold the map of Kerry. Can you find Annascaul? Using the map legend can you figure out which of the following are located in Annascaul:
 - Post Office
 - Police Station
 - River
 - Beach
 - Lighthouse
 - Ringfort
 - Youth hostel
 - Airport
- 2 In addition to the village of Annascaul there are two other features on this map of a similar name. One is Owenascaul River; can you find the second one?
- 3 Unfold the map of Antarctica. Look at the physical side of the map first. Can you find the South Pole? How many weather stations are located on or near the South Pole? (Hint: use the map legend)
- 4 Can you find any features on the map of Antarctica named after Scott or Shackleton? Write down three of them.
- 5 Now look at the political side of the map. Can you find the route taken by Scott on the Terra Nova expedition? (Hint: use the map legend and remember that the Terra Nova expedition lasted from 1911-1912). What is the name of the glacier that Scott's men had to cross over? Can you find the route taken by Amundsen on the Fram expedition?

Bileog oibre 2 | Cruinneog agus mapaí

Ag mapáil eachtraí Tom

Thaisteal Tom timpeall an domhain, ó Abhainn an Scáil go dtí an Antartach. Bhí mapaí rí-thábhachtach do mhairnéalaigh ar nós Tom. Ar cheann de spriocanna eachtraí an Antartaigh ab ea mapaí a fheabhsú do thaiscéalaithe sa todhchaí



- 1 Oscail mapa Chiarraí. An féidir leat Abhainn an Scáil a aimsiú? Ag baint úsáid as eochair eolais an mhapa an féidir leat a dhéanamh amach cá bhfuil siad seo a leanas lonnaithe:
 - Oifig an Phoist
 - Stáisiún Gardaí
 - Abhainn
 - Trá
 - Tigh Solais
 - Ráth
 - Brú an Óige
 - Aerfort
- 2 Chomh maith le sráidbhaile Abhainn an Scáil, tá dhá ghné eile ar an mapa seo den ainm céanna. Ar cheann acu tá an abhainn, an féidir leat an ceann eile a aimsiú?
- 3 Oscail mapa an Antartaigh. Féach ar thaobh fisiciúil an mhapa ar dtúis. An féidir leat an Pol Theas (South Pole) a aimsiú? Cén méid stáisiún aimsire atá lonnaithe ar nó gar don bPol Theas? (Leide: úsáid eochair eolais an mhapa.)
- 4 An féidir leat gnéithe a aimsiú ar an mapa atá ainmnithe i ndiaidh Scott nó Shingleton? Breac síos trí cinn acu.
- 5 Féach anois ar thaobh polaitiúil an mhapa. An féidir leat an cúrsa a thóg Scott ar eachtra an Terra Nova? (Leide: úsáid eochair eolais an mhapa agus cuimhnigh gur lean eachtra an Terra Nova ó 1911-1912.) Cén ainm atá ar an oighearshruth gur b'éigean do bhuíon Scott a threasnú? An féidir leat an cúrsa a thóg Amundsen san eachtra leis an Fram?

Activity sheet 3

Compass and sextant

Navigation instruments

A compass and a sextant are two scientific instruments used by Antarctic explorers. Both instruments were used for navigation. Navigation is the art of getting from one place to the other. The compass is used to find direction (i.e. north and south). The sextant is used to find position (i.e. longitude and latitude)



- 1 Look at the compass. Is it heavy or light? Does it fit easily into your hand? Why do you think it has a lid?
- 2 Place the compass on a flat surface, such as your desk. Once the compass has stopped moving, you will be able to read directions from it. What direction does your teacher's desk face? What direction does your desk face?
- 3 Do any of the windows in your classroom face east? What time of the day does the sun tend to shine in these windows? Can you figure out why this is so?
- 4 Observe what happens to the compass when you move the magnet close to it. Why do you think this is the case?
- 5 A sextant was an important instrument aboard any boat. How can you tell this from looking at the sextant? Is it heavy or light? Can you guess what material it might be made from?

Bileog 3 | Compás agus seasamhán

Uirlisí loingseoireachta

Is dhá uirlis eolaíochta iad compás agus seasamhán a bhí in úsáid ag taiscéalaithe an Antartaigh. Úsáidtí iad mar chomharthaí loingseoireachta. Is ceird í an loingseoireacht le dul ó áit go háit. Úsáidtear an compás chun treo a aimsiú (i.e. thuaidh agus theas). Úsáidtear an seasamhán chun suíomh a aimsiú (i.e. domhanfhad agus domhanleithead)



- 1** Féach ar an gcompás. An bhfuil sé trom nó éadrom? An oireann sé go héasca don láimh? Cad ina thaobh go bhfuil clúdach air, dar leat?
- 2** Cuir an compás ar dhromchla cothrom, ar do bhinse, mar shampla. Nuair a stadann an compás ag gluaiseacht, beidh tú in ann treonna a léamh as. Cén treo ina bhfuil binse an mhúinteora dírithe? Céin treo ina bhfuil do bhinse féin dírithe?
- 3** An bhuil aon fhuinneog i do rang dírithe soir? Cén am sa ló go lonraíonn an ghrian tríd an fhuinneog sin? An bhfuil fhios agat cén fáth san?
- 4** Tabhair faoi ndeara cad a tharlaíonn don gcompás nuair a bhogann tú an maighnéad in aice leis. Cad ina thaobh é seo, dar leat?
- 5** Is uirlis thábhachtach é an seasamhán ar bord báid ar bith. Conas atá fhios agat é sin ag féachaint ar an seasamhán? An bhfuil sé trom nó éadrom? Cad as atá sé déanta, dar leat?

Activity sheet 4 | Ditty box and documents

Tom's valuables

Sailors, like Tom, could carry very little with them when they went on adventures. They would keep most of their important objects in a small wooden box known as a 'ditty box'. Inside this ditty box you will find a copy of Tom's Certificate of Service, a letter from Captain Scott, a pipe and a tin of Tom's favourite tobacco



- 1 Can you answer the following questions by reading Tom's Certificate of Service?
 - a. What was Tom's date of birth?
 - b. What colour were Tom's eyes?
 - c. When did he join the Royal Navy?
- 2 Create a timeline, using Tom's Certificate of Service, showing the major events in Tom's naval career, such as the year he joined the Royal Navy and the year he was awarded the Albert Medal.
- 3 Read the letter that Scott wrote to Tom and answer the following questions.
 - a. When did Scott write this letter?
 - b. What was the first task Scott wanted Tom to assist with?
 - c. How do you think Tom felt when he got the letter?
 - d. Imagine you are Tom. Write a response to this letter.
- 4 Tom put things that were important to him into his ditty box. List some of the other things you might have found in Tom's ditty box. If you had a ditty box what would you put in it? You could make your own ditty box (from cardboard or clay) in class.

Bileog oibre 4 | Bosca maingín & cáipéisí

Nithe luachmhara Tom

Ba bheag an méid gur féidir le mairnéalaigh, ar nós Tom, a thabhairt leo ar eachtraí. Coimeádtáí na rudaí ab ansa leo i mbosa beag adhmaid ar a dtugtaí 'bosca maingín'. Istigh ann tá cóip de Theastas Seirbhíse Tom, litir chuige ó Scott, píopa agus stán dá rogha tabac



- 1 An féidir leat na ceisteanna seo a fhreagairt ag léamh Teastais Seirbhíse Tom?
 - a. Cad é lá breithe Tom?
 - b. Cén dath a shúile?
 - c. Cathain ar ghlac sé páirt sa Chabhlach Ríoga?
- 2 Cruthaigh amlíne, ag úsáid Teastais Seirbhíse Tom, chun mór-imeachtaí shaol Tom sa chabhlach a léiriú, ar nós an bhliain gur ghlac sé páirt sa Chabhlach Ríoga agus an bhliain gur bronnadh Bonn Albert air.
- 3 Léigh an litir a scríobh Scott go Tom agus tabhair freagraí ar na ceisteanna seo:
 - a. Cathain ar scríobh Scott an litir?
 - b. Cad é an chéad chúram a bhí ag Scott do Tom?
 - c. Conas, dar leat, gur bhrath Tom nuair a fuair sé an litir?
 - d. Samhlaigh gur tusa Tom. Scríobh freagra ar an litir.
- 4 Bhí rudaí pearsanta ag Tom in a bhosca maingín. Déan liosta de rudaí eile a cheapann tú go mb'fhéidir a bhéas sa bhosca. Má bhí bosca maingín agat féin, cad a chuirfeá isteach ann? D'fhéadfá do bhosca maingín féin a dhéanamh (as cairtchlár nó cré) sa rang.

Activity sheet 5

Stone and photograph

The hero Tom Crean

Tom Crean is an important figure in Antarctic history. There is both a mountain and a glacier in Antarctica named after him. A stone from Crean mountain is included in the Loan Box. A picture of Tom's Albert Medal is also included



- 1** Pick up the stone. Is it heavy? What colour is it? Does it feel any different to the stones that you find locally? Draw a picture of the stone to scale. (Hint: use squared paper and a ruler).
- 2** There is a mountain and a glacier in Antarctica named after Tom. Why do you think this is? Are there any mountains, or other features, in your area named after people? (Hint: these could be roads or buildings). Do you know their stories?
- 3** Look at the picture of the Albert Medal. Why was Tom awarded this medal? (Hint: carefully read the inscription on the front of the medal).
- 4** Tom was known as a hero when he came back from Antarctica. However, you do not have to save someone's life to be a hero. Discuss with your class what makes a hero. Is there anyone in your life that could be described as a hero?
- 5** Write a short story about a hero that you know. Design a medal that you could present to this him or her? (Hint: you can use cardboard)

Is duine tábhachtach é Tomás Mac Corraidhín. Tá cnoc agus oighearshruth san Antartach ainmnithe ina dhiaidh. Tá cloch ó Chnoc Crean iniata sa Bhosca lasachta chomh maith le pictiúr de Bhonn Albert gur le Tom é



- 1 Tóg suas an chloch. An bhfuil sí trom? Cén dath í? An bhfuil sí difriúil ó chlocha atá ar fáil go háitiúil? Tarraing pictiúr den gcloch go scála. (Leide: úsáid páipéar cearnaithe agus rialóir.)
- 2 Tá cnoc agus oighearshruth san Antartach ainmnithe i ndiaidh Tom. Cad ina thaobh é seo, dar leat? An bhfuil aon chnoc nó aon ghné eile i do cheantar féin ainmnithe i ndiaidh daoine? (Leide: bóthar nó foirgneamh.) An bhfuil a scéalta agat?
- 3 Féach ar phictiúr bhoinn Albert. Cad ina thaobh gur bronnadh an bonn seo ar Tom? (Leide: léigh go cúramach an inscríbhinn ar thosach an bhoinn.)
- 4 Bhí cáil ar Tom mar laoch nuair a d'fhill sé ón Antartach. Ní ghá duit beatha duine eile a tharrtháil chun bheith i do laoch. Pléigh leis an rang cad is laoch ann. An bhfuil éinne i do shaol go nglaofa laoch air nó uirthi?
- 5 Scríobh gearrscéal faoi laoch go bhfuil aithne agat air nó uirthi. Déan dearadh ar bhonn gur féidir leat bronnadh air nó uirthi. (Leide: d'fhéadfá cairtchlár a úsáid.)

Activity sheet 6 | Clothing

Replicas and modern gear

To survive in the harsh environment of the Antarctic, explorers have to wear specially designed clothing. Even today, as in Tom's time, having the correct gear is a matter of life and death

Copy of the 'Burberry' outer-wear that Tom Crean wore along with the type of outfit worn by today's explorers



- 1 Try on the Burberry outfit. Can you describe what it feels like? (Hint: comfortable, light or warm) What do you think Tom Crean might have worn underneath it?
- 2 Try on the modern outfit. What does the material of the outer jacket and trousers feel like? Does it feel different to the Burberry outfit?
- 3 Compare the Burberry outfit to the modern outfit. List the differences and the similarities. If you were travelling to Antarctica which outfit would you rather bring, and why?
- 4 Why do you think Antarctic clothing has changed over time?
- 5 Which pieces of clothing were most important for Tom Crean to wear to avoid getting frostbite?
- 6 Try on the snow goggles. Why do you think Antarctic explorers always wear these?
- 7 Imagine that you are an Antarctic explorer. Draw a picture of yourself dressed in your outfit. Don't forget your snow goggles!

Chun teacht tríd timpeallacht gharbh an Antartaigh, b'éigean do thaiscéalaithe feistis le dearadh ar leith a chaitheamh. Fiú sa lá atá inniu ann, agus le linn Tom féin, is cúrsa báis nó beatha é an feisteas ceart

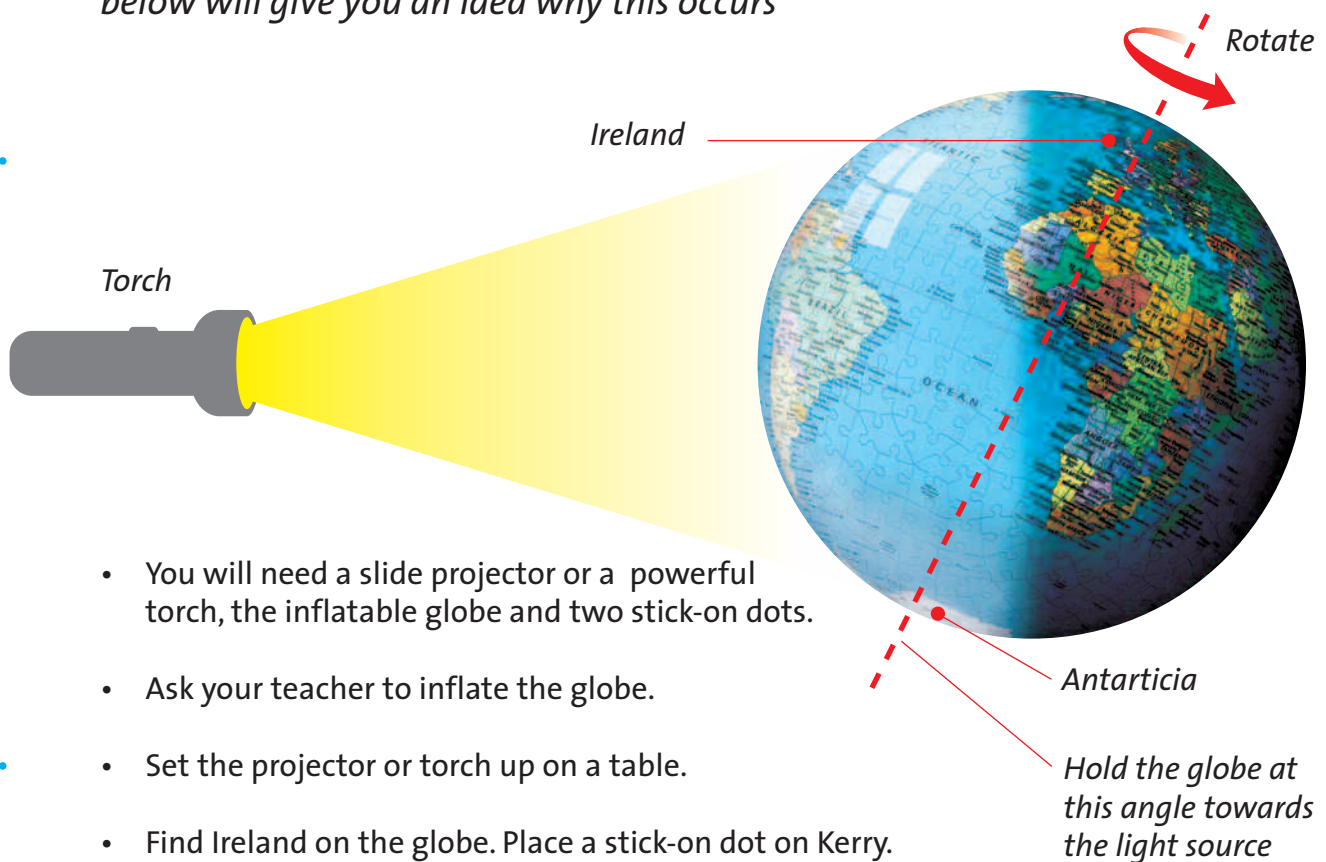
Cóip den bhfeisteas amuigh ar chaith Tom Mac Corraidhín chomh maith le feisteas taiscéalaithe an lae inniu



- 1 Bain triail as feisteas Burberry. An féidir leat cur síos a dhéanamh ar conas a braitheann sé? (Leide: compordach, éadrom nó te.) Cad a cheapann tú gur chaith Tom faoi?
- 2 Bain triail as an bhfeisteas nua-aimseartha. Conas a mhothaíonn ábhar an seaicéid amuigh agus na brístí? An bhfuil sé difriúil ón bhfeisteas Burberry?
- 3 Déan comparáid le feisteas Burberry agus feisteas nua-aimseartha. Déan liosta des na difríochtaí agus na cosúlachtaí. Dá mbeifeá ag taisteal go dtí an Antartach cén fheisteas go mb'fhearr leat a bheith agat, agus cén fáth?
- 4 Cad ina thaobh, dar leat, go bhfuil an feisteas athruaithe thar na blianta?
- 5 Cén chuid den bhfeisteas ba thábhachtaí iad do Tom Mac Corraidhín mar chosaint ar dhó seaca?
- 6 Bain triail as na gloiní sneachta. Cad ina thaobh, dar leat, go gcaitheann taiscéalaithe an Antartaigh iad i gcónaí?
- 7 Samhlaigh gur taiscéalaí Antartaigh tú. Tarraing pictiúr duit féin agus tú feistithe. Agus ná dearmad do ghloiní sneachta!

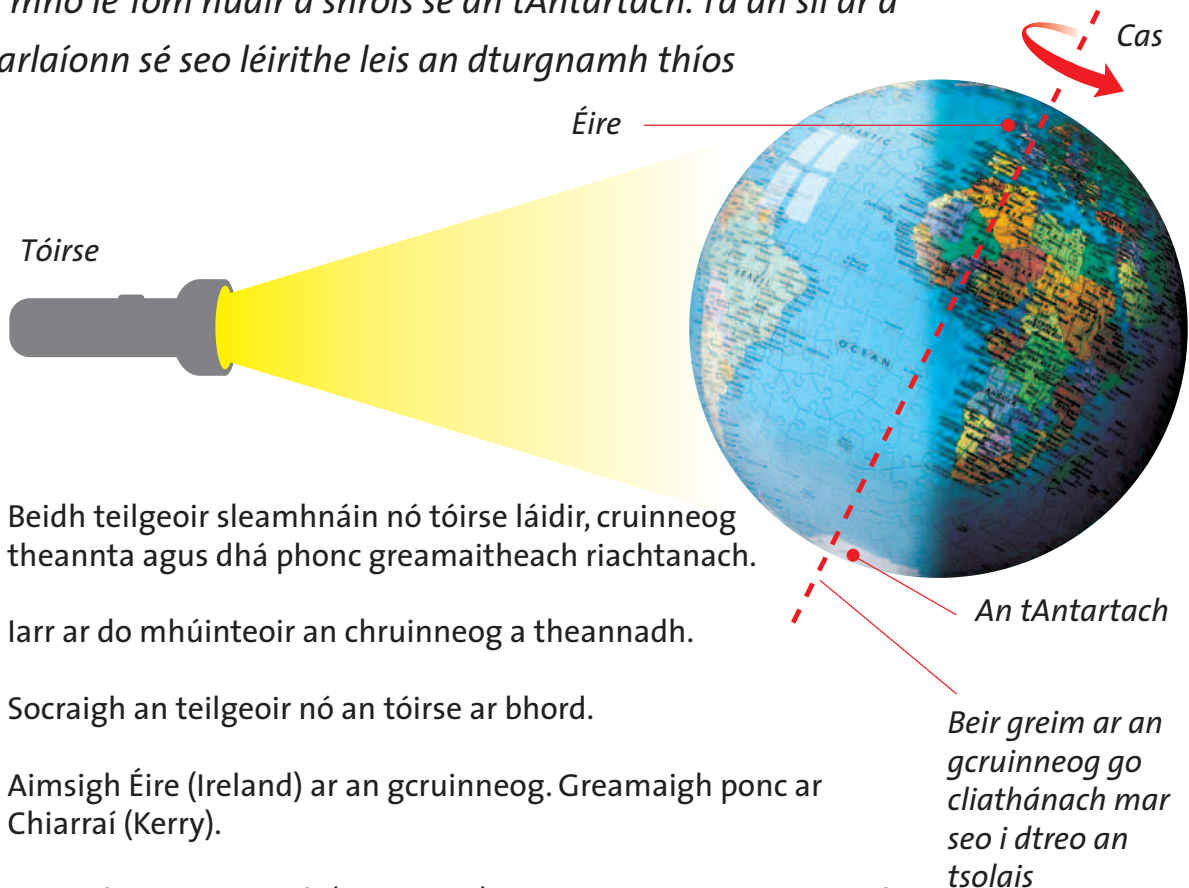
Activity sheet 7 | Understanding Antarctic daylight

In Antarctica there is continuous daylight for six months of the year and complete darkness for six months of the year. This was one of the main differences for Tom when he went to Antarctica. The experiment included below will give you an idea why this occurs



- You will need a slide projector or a powerful torch, the inflatable globe and two stick-on dots.
- Ask your teacher to inflate the globe.
- Set the projector or torch up on a table.
- Find Ireland on the globe. Place a stick-on dot on Kerry.
- Find Antarctica on the globe. Place a stick-on dot on the South Pole.
- Have one student hold the globe on an angle in the centre of the torch's beam as shown in the illustration.
- Imagine it is December 21st, the winter solstice.
- Slowly spin the globe from west to east the way the Earth spins. If you are not sure which way is east, use your compass to check.
- Notice that Antarctica remains light all day and the Arctic remains dark all day.
- What happens to the countries in between?

San Antartach tá solas an lae ann go leanúnach ar feadh sé mhí sa bhliain agus é dorchá ar fad le linn na sé mhí eile sa bhliain. B'é seo an éagsúlacht ba mhó le Tom nuair a shrois sé an tAntartach. Tá an slí ar a tharlaíonn sé seo léirithe leis an dturgnamh thíos

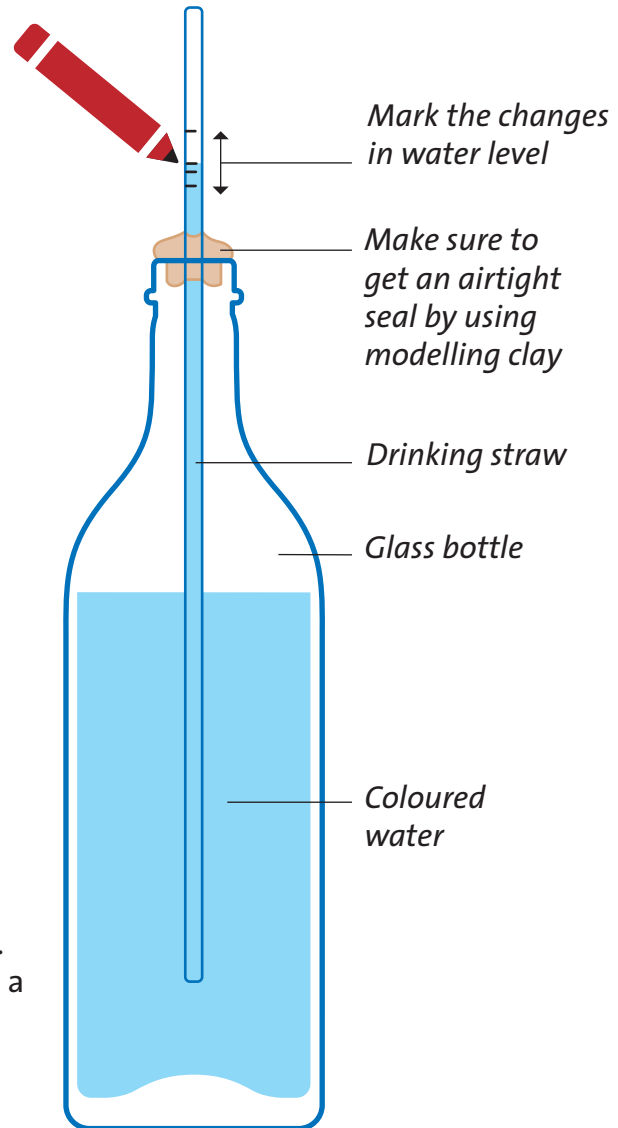


- Beidh teilgeoir sleamhnáin nó tóirse láidir, cruinneog theannta agus dhá phonc greamaitheach riachtanach.
- Iarr ar do mhúinteoir an chruinneog a theannadh.
- Socraigh an teilgeoir nó an tóirse ar bhord.
- Aimsigh Éire (Ireland) ar an gcruinneog. Greamaigh ponc ar Chiarraí (Kerry).
- Aimsigh an tAntartach (Antarctica) ar an gcruinneog. Greamaigh ponc ar an bPol Theas (South Pole).
- Bíodh an chruinneog i ngreim dalta amháin go cliathánach i dtreo lár léas an tóirse mar atá sa léiriú.
- Samhlaigh gur inniu an 21ú lá Nollag, grianstad an gheimhridh.
- Cas an chruinneog go mall aniar is soir mar a chasann an Domhan. Muna bhfuil tú cinnte cén treo atá soir, déan tagairt le do chompás.
- Tabhair faoi ndeara go bhfanann an tAntartach (Antarctica) geal an lá ar fad agus go bhfanann an tArtach (Arctic) dorchá ar lá ar fad.
- Cad a tharlaíonn dos na tíortha idir eatarthu?

Activity sheet 8

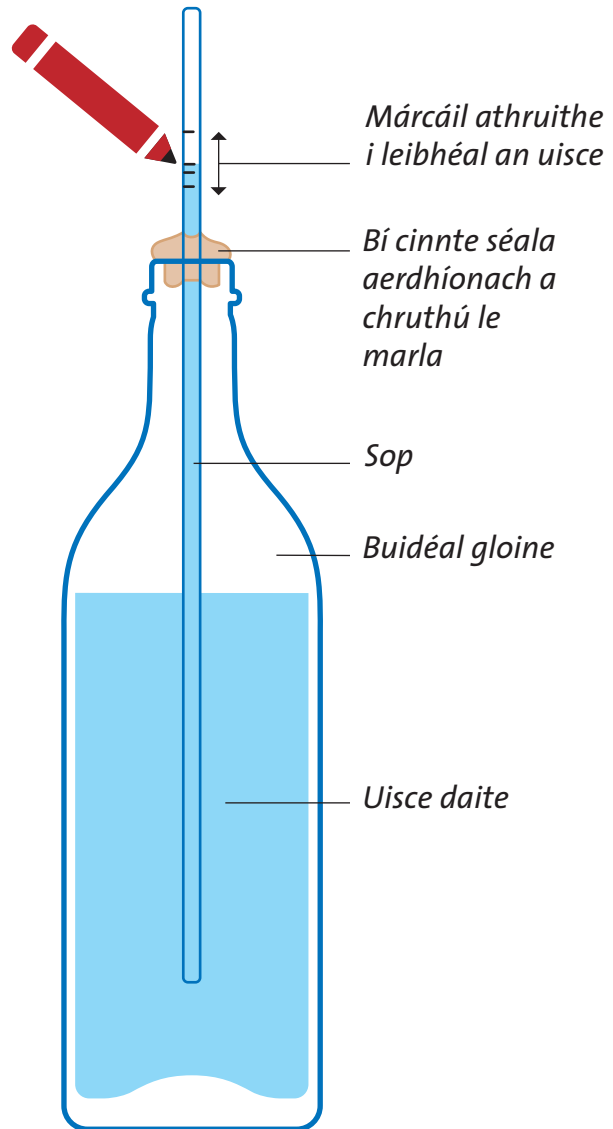
How to make a Barometer

Barometers were used in the Antarctic to measure air pressure. This allowed the explorers to predict the weather before setting out on a journey



- You will need a clear glass bottle or jar (not plastic), water, a clear plastic drinking straw, modelling clay.
- Fill the bottle two-thirds full with water. It's a good idea to colour the water with a little food dye or ink to make it easier to see. Insert the straw part way into the bottle, making sure that the end of the straw is below the water level.
- Seal the neck of the bottle around the straw with modelling clay. Make sure there are no gaps where air could escape.
- Mark the water level in the straw. Observe the level over a number of days to see how it changes.
- Record the weather conditions outside on each of the days that the barometer is observed. When the air pressure outside the bottle decreases, the trapped air inside the bottle will make the water level in the straw fall. If you see this, watch for stormy weather. If the pressure outside the bottle increases, it will push the water further up in the straw, meaning fair weather ahead.

Baintí úsáid as baraiméadair san Antartach chun aerbhrú a thomhas. Thug sé seo deis do thaiscéalaithe an aimsir a réamh-mheas roimh tabhairt faoi thuras



- Beidh buidéal nó próca gléghloine uait (ní plaisteach), uisce, sop gléghlan agus marla.
- Líon dhá-thrian den mbuidéal le huisce. Is pian maith é an t-uisce a dhathú le ruaime bia nó le dúch chun é a fheiscint níos fearr. Cuir an sop isteach sa bhuidéal ag cinntiú go bhfuil deireadh an tsoip faoi bhun leibhéil an uisce.
- Séalaigh scóig an bhuidéil timpeall an tsoip le marla. Bí cinnte nach bhfuil aon bhearna ann chun aer a scaoileadh amach.
- Márcáil leibhéil an uisce sa sop. Tabhair faoi ndeara thar roinnt laethanta ar conas a athraíonn sé.
- Coimeád cuntas ar an aimsir lasmuigh gach lá go bhfuil an baraiméadar faoi scrúdú. Nuair a laghdaíonn an t-aerbhrú lasmuigh den mbuidéal, 'sé an t-uisce ceansaithe istigh sa bhuidéal is cúis le titim leibhéil an uisce sa sop. Má fheiceann tú é seo, bí ag faire amach d'aimsir stoirmiúil. Má mhéadaíonn an t-aerbhrú lasmuigh den mbuidéal, cuirfeadh sé an t-uisce níos airde sa sop, rud a chiallaíonn go bhfuil dea-aimsir ag teacht.

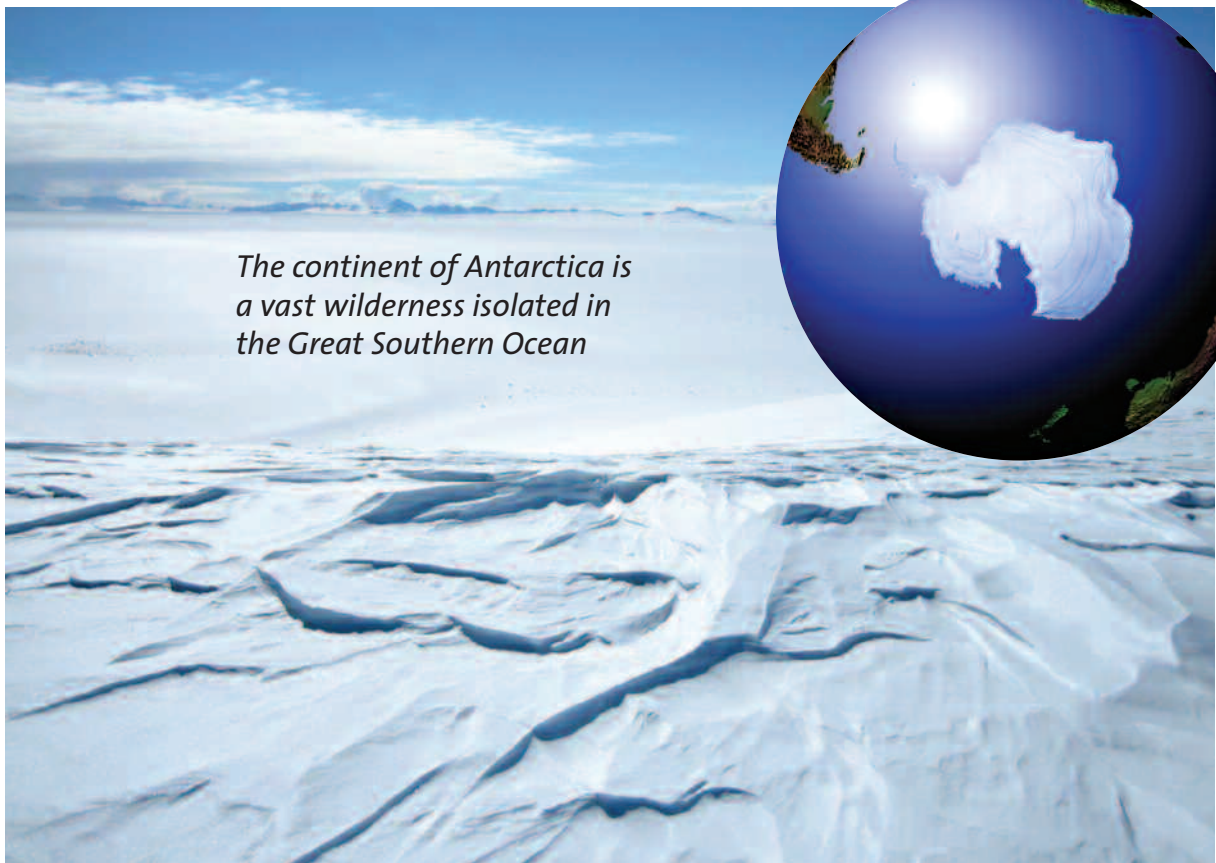
*Discover
more
about:*

Antarctica

In the early 1900s Antarctica, the last great wilderness on the planet, attracted the attention of a special breed of explorers

THE MOST REMOTE PLACE ON EARTH

In the early 20th century Antarctica became the focus for exploration and discovery. Many countries, and men, competed to be the first to plant a flag at the South Pole. Little was known about the Antarctic continent in 1900. No maps of the interior existed and it was still unknown whether men could survive the harsh climate and isolation for months and years. Expeditions to the Antarctic involved a trip of at least one or two years. These early



*The continent of Antarctica is
a vast wilderness isolated in
the Great Southern Ocean*



Tom Crean was a Kerryman with a great appetite for adventure

adventurers were cut off from civilisation. Without radios, communication with the outside was impossible and the only lifeline was a hazardous ship's journey through the violent Southern Ocean. The early explorers risked their lives on missions of discovery to the unknown continent. Tom Crean was one of these men.

Antarctica today is not the mysterious, little-known continent of Tom's day. But it is still the most remote, forbidding place on Earth. Its land area is almost 14 million square kilometres – twice the size of Australia and 161 times the size of Ireland. More than 99% of Antarctica lies hidden under permanent ice and snow, with the ice cap up to 4,800 meters thick from the accumulation of hundreds of thousands of years of falling snow. Antarctica has 90% of the world's ice – that's 70% of the world's fresh water.

The world's strongest winds and the lowest temperatures are found here. The record is minus 89.2°C in 1983. Perhaps surprisingly, Antarctica is also the driest continent. Snowfall is light and the region is regarded as a polar desert. In the summer (November to February) it has round-the-clock daylight; winter varies from twilight to permanent darkness.

PLANT AND ANIMAL LIFE

Only a few small plants and insects can survive in the extreme conditions in Antarctica. There are various bacteria and microbes, lichens, mosses and over 700 species of algae. Animals range from worms to insects and their relatives, such as midges, lice and springtails.

Sea life, in contrast, is abundant in the surrounding waters. Penguins, seals, whales, and many kinds of sea birds call Antarctica their home, although they come on shore

Discover more about: Antarctica



only to breed. They spend most of their time in or over the water, where they get their food.

All the plant and animals that live in Antarctica have adapted to living in cold and windy conditions. Some animals, such as seals, whales and penguins have a thick layer of fat, called blubber. The blubber helps keep their body heat in. These animals have a heavy and closely-packed outer layer of fur or feathers to help keep them dry.

The wildlife in Antarctica has evolved over millions of years. The animals developed in a place where there are no natural enemies on land – and where people were not present until recently. So the animals aren't afraid of people, which once made them easy targets for hunters. At one time, the populations of many of the animals had been greatly reduced because of this. Hunting for seals and



The two species of birds most associated with Antarctica are the Emperor (main photo) and Adélie penguins



The wildlife that teems in the Great Southern Ocean around Antarctica proved to be an invaluable source of food for the early explorers. Sea lions in particular were highly valued



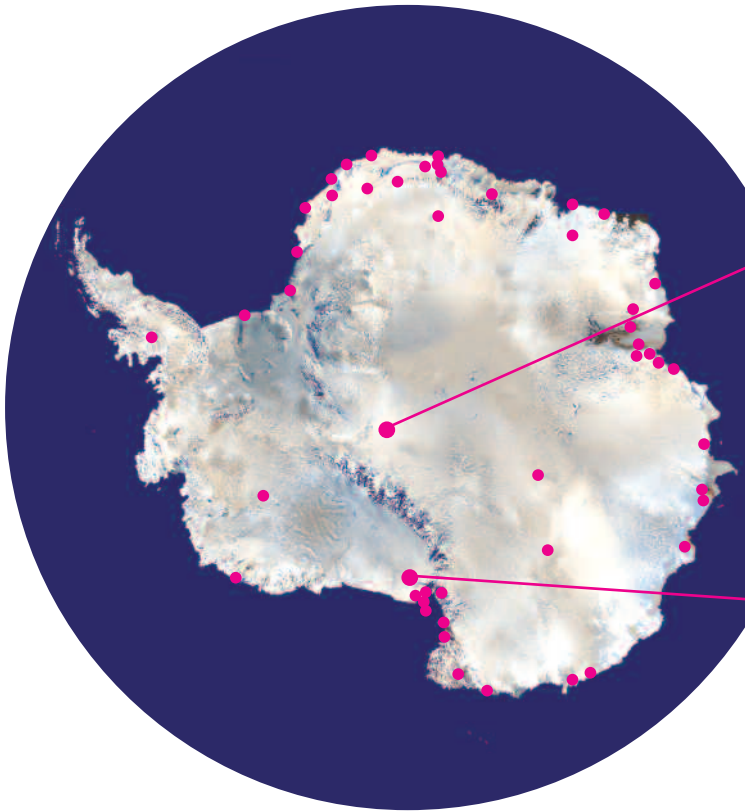
penguins and other marine life is now controlled by international treaties.

Penguins are the most common birds in the Antarctic. They live in colonies larger than some cities and can survive in the harshest of conditions. There are eighteen different species of penguin, and only two, the Emperor and the Adélie, make the Antarctic their true home.

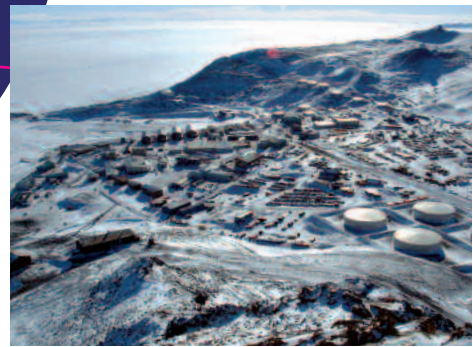
ANTARCTICA TODAY

Antarctica has no native people. Those who live and work there today are mostly from scientific organisations. In summer the total population may exceed 5,000 but in winter it decreases to less than 500.

Discover more about: Antarctica



*Amundsen-Scott South Pole Research Station
Summer population: 200
Winter population: 50*



*McMurdo Research Station
Summer population: 1,000
Winter population: 200*

30 countries have research stations dotted all around Antarctica. The two largest, Amundsen-Scott South Pole Station and McMurdo Station, belong to the USA. Both bases were established in the 1950s

Antarctica is not owned or ruled by any one country. In 1959, the Antarctic Treaty was signed. The Treaty allows scientists from all different countries freedom to work and to exchange information. It bans testing of nuclear weapons and dumping of nuclear waste in Antarctica, and forbids the building of military bases on the continent.

For modern scientists Antarctica is of key importance to understanding of how the world works. Within the Earth system, the Antarctic, although it is geographically remote, is of special relevance. The Southern Ocean, its sea cover and the great Antarctic ice sheet are important parts of the climate system. The Antarctic environment provides a sensitive indicator of global change. Antarctic ice cores tell us about the history of past climate, which can help us predict the climate of the future.

Discover more about: Antarctica



Halley VI Mobile Research Station



Princess Elisabeth Permanent Base



Juan Carlos I Summer Antarctic Base



New types of habitations and research stations are been built in Antartica all the time. Can you name the three European countries that own the bases pictured above? The flags are a clue.



Q Do you think the discovery of Antarctica was important?

Q Why, do you think, countries competed to be the first to reach the South Pole?

Q Antarctica is not owned or ruled by any one country. Do you agree with this?



CLASSROOM ACTIVITY

Some of the scientists working in Antarctica are there to conserve, and study the huts used by Tom, and his friends. These scientists work for the Antarctic Heritage Trust. Find out what it's like to live in Antarctica and preserve the artefacts left behind by the great explorers in the conservators' blog:
www.nhm.ac.uk/natureplus/community/antarctic-conservation

Discover
more
about:

Surviving in the Antarctic

Antarctica is the coldest, windiest and driest continent in the world. The temperature can range between +5°C and -70°C, and the winds can gust up to 320 km per hour. So how did explorers, like Tom Crean, stay alive in such an inhospitable environment? Their lives depended on wearing the right clothes and eating the right food

DRESS TO SURVIVE

There is a fine art to dressing against the extreme cold. Overdressing is actually just as dangerous as wearing too little, because it causes sweating. If you sweat, the moisture will freeze, making you cold. Clothing needs to allow body moisture to escape and insulating air to form between the clothing and the skin, whilst remaining waterproof. Several layers of loose, lightweight breathing fabrics under a windproof cover are ideal.



Dressing correctly so that you can carry out strenuous physical work in Antarctica is a balancing act. Too much clothes is as dangerous as too little

WHAT DID TOM CREAN WEAR IN ANTARCTICA?

Crean's Antarctic clothing consisted of Burberry overalls (a replica set is included in the Loan box) over a suit of warm underwear, a pair of ordinary trousers and a thick sweater. The light overalls comprised of a blouse and trousers tied round the neck, waist, wrist and



ankles with cord. They were windproof and very loose. This allowed warm air to build up between the layers and provided insulation against the bitter cold outside. Norwegian explorers, travelling to the Antarctic at the same time as Tom Crean, copied Inuit clothing. They wore animal furs, such as seal, fox, wolf, reindeer and bear, from head to foot. Furs kept out the wind effectively and provided excellent insulation against the cold.

Tom is photographed here in his Burberry top. It must have been a 'warm day' as he's not wearing his mitts or gloves



Tom, sitting on the left, is busy with his friend Taff Evans mending a piece of their gear. Can you tell what they are working on? Do you think these articles were an important part of their kit? Why?

Discover more about: Surviving in the Antarctic

MAJOR RISKS: FROSTBITE

Frostbite is when the skin or tissue under the skin freezes. It is caused by exposure to the cold. Under extreme conditions, like those in Antarctica, frostbite can occur in seconds. Your face, ears, hands and feet are most at risk. To stay alive at such cold temperatures you have to give particular attention to those areas. In the worst cases, where blood stops circulating, skin tissue can die. If dead tissue becomes infected this is known as gangrene. Gangrene can lead to amputation of limbs or – if the infection is severe – death!

Crean wore a woollen muffler and Burberry hood to keep his face and ears warm and to protect his feet he wore two or three pairs of woollen socks with outdoor boots. There were two different types of outdoor boots – thick leather and soft reindeer fur. The soft boots reduced risk of frostbite because the foot could move easily and therefore stay warm. However, leather boots were safer when walking on rocks because they give a better grip. Crean and his companions stuffed their boots with a type of Arctic grass called sennegrass to help insulate their feet.



Frostbite is the biggest threat to people operating in sub zero temperatures. It can go unnoticed by the victim until terrible damage is inflicted. Fingers, toes, nose and ears are particularly vulnerable

On his hands Crean wore heavy wolf skin outer mittens, secured by cord around his neck. Under these he wore one or two pairs of woollen gloves.

Despite these precautions, many of Crean's companions developed frostbite. One of them said that "The difficulty was to know whether our feet were frozen or not, for the only thing we knew for certain was that we had lost all feeling in them".

MAJOR RISKS: SNOW BLINDNESS

Most of the earth is covered in dark surfaces, such as ocean, rock and vegetation. These absorb a great deal of sunlight. However, the snow and ice of Antarctica reflect the

Discover more about: Surviving in the Antarctic

twenty-four hour sunlight like a mirror. The human eye can be sunburned through overexposure, leading to an intense pain not unlike severe sunburn. This is known as snow blindness. Without proper eye protection, snow blindness develops rapidly leading to painful, inflamed eyes, photophobia (allergy to light) and eventually permanent damage. Snow goggles are the standard form of protection against this. Crean and his companions wore goggles of light green tinted glass in rope and leather.



Early explorers often had to make their own snow goggles and experimented with different materials and styles. Many took inspiration from what Inuit people did in the Arctic

WHAT DO TODAY'S EXPLORERS WEAR TO ANTARCTICA?

Modern synthetics have revolutionised cold weather clothing. They are lightweight yet highly thermally efficient, allowing present day explorers to wear far less than their predecessors. Windproof techniques have also advanced greatly, as have breathable fabrics which allow moisture to escape while retaining warmth. Sweating is therefore now far less of a problem. You will find in the loan box an example of the type of outfit worn by today's polar explorers.

Discover more about: Surviving in the Antarctic



Modern synthetic materials are waterproof, hard-wearing and breathable. Today's equipment is very lightweight but incredibly strong, while snow visors provide 100% protection from snow blindness

EAT TO SURVIVE

In order to survive the harsh Antarctic conditions, careful attention must be paid to diet: eating the right foods and in the right amounts. Extra energy is required to produce enough heat to keep the body warm. A continual intake of fluids is also essential. Antarctica is a polar desert and very dry. In such a dry environment large amounts of fluid are lost via the skin and lungs. Therefore dehydration is a constant threat.

WHAT DID THE TOM AND HIS FELLOW EXPLORERS EAT?

The shores and surrounding seas of Antarctica provide an unlimited food resource in the form of the penguins and seals. These provide protein, fat and vitamin C. However, there is no edible vegetation.

Thus, Antarctic travellers have a dual diet; one for base camp, near the shore, and one for sledging, to the South Pole. At base camp the diet can be rich and varied as supplies allow, and can be supplemented infinitely with seal and penguin meat. During sledging, however, all food has to be dragged as extra weight, so it must be carefully composed and rationed according to calorific, nutritional and weight requirements.

Discover more about: Surviving in the Antarctic

Base camp diet would typically have consisted of fresh well baked bread daily, seal meat three times a week, pies and other dishes of tinned meat three times a week, and fresh mutton once. To this was added a good supply of butter, milk, cheese, jam and bottled fruits.

A primus stove would have been used to heat ice. This was the only practical way to produce drinking water in the Antarctic. Eating unmelted snow lowers body temperature, can cause illness and would also result in frostbitten tongues.

When base camp is left behind and the journey to the South Pole is begun, all foodstuffs have to be transported by explorers. The primary foods on sledging journeys were pemmican, biscuit, tea or cocoa, sugar and sometimes frozen seal meat.



Penguins made up an important part of the explorers diet. Here we see the cook skinning an Emperor penguin before popping it into the pot. Delicious!

PEMMICAN

Pemmican was invented by the Cree Indians of Canada. It is a concentrated meal of lean beef, sundried then pounded/shredded and mixed into a paste with melted fat. It can keep for months, and can be chewed like biscuit or made into a stew. It is a high energy food that lasts a long time when the weather is cold. The pemmican that Crean ate would have been made of 40% dried, powdered beef and 60% beef fat.

Discover more about: Surviving in the Antarctic

MASTERCHEF ANTARCTICA – PEMMICAN (YOU CAN FOLLOW THIS RECIPE AT HOME)

Ingredients and equipment

- 4 strips of raw beef, each about 4 inches long and 1 inch wide, after any fat has been trimmed off and discarded (flank, round, or strip steak is best)
- Roasting Pan
- Medium-sized bowl
- 5-6 tablespoons of butter or suet (animal fat)
- Small saucepan
- 4 small plastic bags

Method

1. Preheat the oven to 95°C.
2. Place the meat strips in a single layer in the roasting pan (do not grease the pan first). Leave as much space as possible between the strips.
3. Place the pan in the heated oven. Cook for about two and a half hours, until the meat almost feels like dry leather, but will bend without breaking. Remove the pan, turn off the oven and let the meat cool.
4. Cut and mash the cooled meat into tiny pieces, almost to a powder. The closer you get it to a powder, the better the pemmican will hold together at the end. Place the powdered meat in a medium sized bowl and set it aside.
5. Melt the butter or suet in a small saucepan over a very low heat. Don't let it boil or brown.
6. Pour the melted butter into the bowl with the powdered beef and mix together thoroughly. Roll the mixture into four balls about the size of golf balls. Place them in the refrigerator and chill for at least an hour, until the butter has solidified and will hold the mixture together.
7. Place each pemmican ball into a plastic bag. Partially seal the bags shut, leaving a small opening so that the balls will dry out a bit. Store in the refrigerator overnight.
8. When the pemmican balls have dried, they are ready to eat. Pemmican balls may be stored in the refrigerator for up to one month.

Discover more about: Surviving in the Antarctic



These are some of the food brands that were supplied to the expeditions. Can you find any of these in your local supermarket? Why not check the next time you go food shopping?

Cadburys Cocoa Powder



Bird & Sons Custard Powder



Colman's Mustard



Heinz Baked Beans



Q If you were going on a trip to explore Antarctica what types of food would you bring?

Q Explain why you think you've made a good selection?



These are a pair of snow goggles used by Antarctic explorer Captain Scott. What are they made of? How did they work? Do you think they did a good job in protect his eyes? Why?

Discover
more
about:

An Antarctic winter

During the Antarctic winter, the sun disappears below the horizon from April to August. A curtain of darkness descends, heightening the feeling of desolation and loneliness

REPAIRS, HUNTING, COLLECTING

Tom and his colleagues knew the importance of keeping occupied. Everyone was encouraged to have fresh air each day despite the cold. On both *Discovery* and *Terra Nova* Captain Scott encouraged after-lunch outdoor groups to carry out routine jobs or to simply stretch their legs and arms. Ice had to be collected on a daily basis for the ships water supply. The ponies and the dogs had to be tended. Repairs were attended to –



Tom, on the left of the photo, and fellow crew members of the Terra Nova are pictured here working on a piece of equipment in preparation for the up-coming journey to the South Pole



Can you identify the object the men are working on in this picture?

sledges, tents, clothing, awning, ice axes – everything had to be in good order. Clearing the snow from the ship was another priority. Tons of weight on deck couldn't be allowed, although, drifting snow round the sides of the vessel was left as insulation.

Hunting parties were sent to kill seals and penguins for fresh meat; fish holes were made. Some of the men were instructed to help the scientists collect specimens. Specimens of rock, fossils and marine life were collected, examined and catalogued. Conditions were recorded several times daily at weather stations set up by the team, including air and ice temperature, atmospheric pressure, wind speed and snowfall.



Q *Why do you think all these weather recordings were taken?*

INDOOR ACTIVITIES

Most evenings there was some kind of arranged event for the men. These events included music recitals, lectures, mini-theatre plays, photographic viewings and games. The men also amused themselves with woodcarving, reading, writing up diaries, writing letters, debates, repairing clothes, making sledging flags and playing games such as shove ha'penny, chess and card games. The 'South Polar Times' was published first on *Discovery* and later on *Terra Nova*. It tended to carry amusing articles, scientific papers, a great number of jokes and illustrations.



Many of the men were highly-skilled model-makers as is clearly illustrated by this photograph of Corkman, Patrick Keohane, working on a remarkably accurate replica of the Terra Nova

Discover more about: An Antarctic winter



The crew put a lot of time, effort and creativity into their theatrical events. Humour was always the number one ingredient



CLASSROOM ACTIVITY

The Antarctic explorers had a lot of fun putting together their newspaper 'The South Polar Times'. Why not take inspiration from them and make a class newspaper. Each person can contribute an article, story, poem, joke or picture. Don't forget to come up with an original name for your newspaper!

OUTDOOR PERSUITS

When the weather allowed it, outside activities were organised. The crew learned to ski and sledging parties went out to give the men experience of using the sledges. The men even played football and organized a sports day



Playing football on the ice was a popular diversion while the ship was held up. Check out the Sports Programme in the Loan Box

MIDWINTER CELEBRATIONS

Christmas Day (25th December) occurs in midsummer in Antarctica. At this time of year the men, Tom and his companions, were on sledging expeditions so there was no time for big celebrations. Instead a large celebration was held at base camp for midwinter's day. How the day was celebrated varied from expedition to expedition but it was always a day of celebration. In 1910 the men dined on fresh penguin, roast beef, plum pudding, mince pies and asparagus. In 1911 there were presents which included cigars and pop guns. During the *Endurance* expedition food was often in short supply. One midwinter's day the men made a drink from hot water, sugar, ginger and methylated spirits. They also stewed old seal bones that they had dug up, heating them in seawater with seaweed for added flavour. Apparently they found it very tasty.



Celebrating Midwinter was very important as a morale boost for the men. It signalled the turning of the year when the never ending dark began to slowly released its grip



Q *Would you like to spend a winter in Antarctica?*

Q *How would you pass the time if you had no access to TVs, computers or mobile phones?*

Q *The explorers celebrated Midwinter in June and not December. Why?*

Discover more about:

Tom Crean

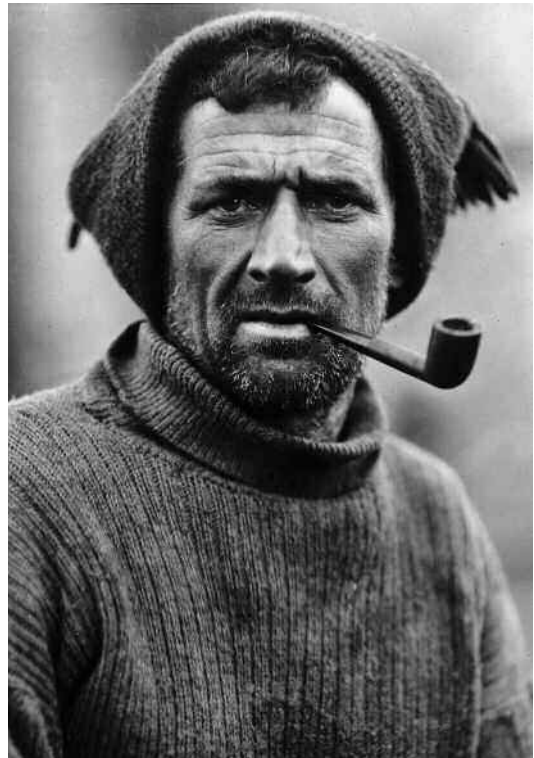
‘Tom Crean was one of the great characters to emerge from the heroic age of Antarctic exploration at the beginning of the twentieth century’

‘FULL OF WIT AND AN EVEN TEMPER’

Tom Crean was one of the first people to explore Antarctica. Very few other Irish people have been to the interior of the Antarctic continent. Crean did not come from a rich family or a well educated background.

He travelled to Antarctica on three expeditions, each of which was named after the ships on which they sailed south; the *Discovery*, the *Terra Nova* and the *Endurance*.

Tom was very popular with his fellow explorers and earned a reputation as a strong sledger, a hard worker and a cheerful companion. These are some descriptions of Tom from those who worked with him in Antarctica.



This famous portrait of Tom was taken during the Endurance Expedition when he was 38 years of age

“Crean was an Irishman with a fund of wit and an even temper which nothing disturbed”

– Albert Borlase Armitage, navigator

“Crean is perfectly happy, ready to do anything and go anywhere, the harder the work, the better”

– Captain Robert Falcon Scott

Discover more about: Tom Crean

Crean was born in Annascaul, Co. Kerry on the 20th July 1877. He came from a typically large Irish family of the day. He was one of ten children – six boys and four girls – born to Patrick and Catherine Crean on the family farm. Crean attended Brackluin School in Annascaul. He enlisted in the Royal Navy in July 1893, when he was almost 16. His opportunities, as a member of a large family on a small farm in west Kerry, would have been limited. It was a decision made out of economic necessity, as it was for many young men up and down the west coast of Ireland.



Q *Why do you think Tom joined the Royal Navy?*

DISCOVERY: 1901-1904

In 1901, Crean was serving in New Zealand on the *Ringarooma* when the *Discovery* passed through en route to Antarctica. Tom volunteered for the expedition, led by Captain Scott, which was to last from 1901-1904. One of Crean's *Ringarooma* shipmates questioned why he had volunteered for such a dangerous expedition and asked: 'I didn't think you were crazy enough for a mad trip to the end of the world.' Crean replied: 'Haven't I been mad enough to come from the other end of the world?'

Few humans had been to Antarctica before the *Discovery* expedition. There was no native population and, without modern radio communications, the explorers faced being cut off from the rest of the world for two years.

The aims of the expedition were; to explore any lands that could be reached, and to undertake various scientific investigations.

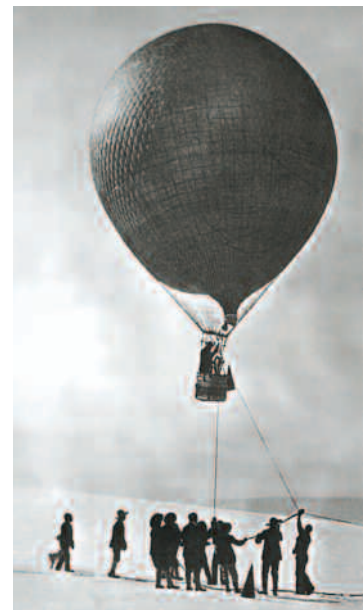


Captain Robert Falcon Scott played a major part in Tom's career. The men had great respect for one another

Discover more about: Tom Crean

On reaching the continent, one of Crean's roles was as a member of a support party whose task was to lay food depots for Scott and his two companions to use on their journey to the South Pole. Scott's party did not make it to the South Pole and were forced to retreat 460 miles from their intended destination. They did, however, achieve a new furthest south.

Although his name rarely appeared in the *Discovery* expedition records, Crean proved himself adaptable to Antarctic conditions and made his mark with Scott, who invited him to serve on his next expedition. A copy of the letter sent by Scott to Crean conveying this message is included in the loan box. In recognition of his efforts, Crean was promoted to Petty Officer First Class on his return to the navy. This was on Scott's recommendation



While the Discovery was iced-in the crew carried out important scientific research into climate, wildlife, geology and magnetism. They also explored and mapped as much of the terrain as possible, sometimes using balloons to help in this work

who wrote of Crean 'Specially recommended for continuous good conduct and meritorious service throughout the period of the Antarctic Expedition 1901-1904.' This can be seen written on the bottom of the second page of the Certificate of Service included in the loan box.

TERRA NOVA: 1910-1913

Crean's second expedition to Antarctica was *Terra Nova*. This expedition was also led by Captain Scott who stated that the main aim was 'to reach the South Pole and secure for the British Empire the honour of this achievement'. *Terra Nova*, however, had competition from the Norwegian expedition Fram, led by Roald Amundsen. A race began to be the first to the South Pole.

Crean, as one of the expeditions most experienced men, was part of the support party that laid food depots for Scott's group as they journeyed towards the Pole. Approximately 150 miles from the Pole, Crean and two others, Teddy Evans and Bill Lashly turned to make the journey back to base camp, as Scott's group continued onwards. It was decided that only five men would continue to the South Pole. Scott felt that Crean might not be able for the journey, as he believed Crean to be suffering from a head cold at the time. However, Crean had hoped that Scott might allow him to continue to the South Pole and was disappointed to be sent back to base camp. Scott wrote that 'poor old Crean wept'.

It was the 4th of January when Crean, Lashly and Evans began to head for base camp.



The Terra Nova in the pack ice, circa 1911

Discover more about: Tom Crean

They were pulling a sledge intended for four. Having found their way onto the Beardmore Glacier by sliding down hundreds of feet of icefalls on the sledge, the men were blocked by huge crevasses. Their only option was to go 'along the crossbar to the H of Hell', as Crean described the crossing of the precarious snow bridges stretching over the crevasses. As they reached the Great Ice Barrier Evans began to suffer from scurvy. His condition deteriorated until, 100 miles from home, he could no longer stand. Crean and Lashly refused to leave him and pulled him on a sledge to within thirty-five miles of Hut Point. While Lashly stayed behind to care for the dying Evans, Crean set out alone on an eighteen hour non-stop march to reach help at the hut.



Lieutenant Teddy Evans, whose life Tom helped to save

Evans was saved and he never forgot the two men who had, he later wrote, 'hearts of lions'. Crean and Lashly were each awarded the Albert Medal for their heroic efforts.

Meanwhile, in mid January 1912, Scott and his team arrived at the Pole. There they



Scott and his doomed party at the South Pole in January 1912. Standing (L-R): Lawrence Oates, Captain Scott and Edgar Evans. Seated (L-R): Henry Bowers and Edward Wilson

discovered that the Fram team, led by Amundsen, had reached it before them. Scott remarked in his diary “Great God! This is an awful place and terrible enough for us to have laboured to it without the reward of priority”. After one day’s stay Scott and his team turned their backs on the South Pole and began the long return trek. However, by March, Scott and the surviving members of his team set up what was to be, their final tent. Unable to continue on their journey due to ill health, a lack of food and poor weather conditions, the team died, with Scott himself being the last, as indicated by the final entry in his diary dated the 29th March 1912. *“Outside the door of the tent it remains a scene of whirling drift. I do not think we can hope for any better things now. We shall stick it out to the end, but we are getting weaker, of course, and the end cannot be far. It seems a pity but I do not think I can write more. R. Scott. For God’s sake look after our people”*

Seven months later the tent and the remains of Scott and his team were discovered by a search party, which included Tom Crean. They buried their comrades in the ice and built a large snow cairn over the grave.

After returning home Tom was promoted to Chief Petty Officer in recognition of his exploits and contributions to the *Terra Nova* expedition.



The final resting place of Scott, Wilson and Bowers was marked with large cairn of snow adorned with a cross

Discover more about: Tom Crean

ENDURANCE: 1914-1917

The third and final trip made by Crean to Antarctica was on the *Endurance* expedition, led by Earnest Shackleton. Shackleton's ambitious aim was to make the first ever coast-to-coast crossing of the Antarctic continent. There were 5000 applicants for the expedition. Only 27 men were selected and Crean was chosen as Second Officer. Tom was also to be one of the six who would attempt to make the crossing of the continent.

However, after sailing to the Weddell Sea via South Georgia, *Endurance* became trapped in the ice in January 1915 and was eventually abandoned in October of the same year. Conditions were such that Shackleton decided to set up camp on the ice and wait for it to break up before launching the life boats. The drifting ice was their home for six months.

On the 9th April 1916 the decision was made to launch the three boats in an effort to reach Clarence or Elephant Island, about 100 miles to the north. Six days later, after what



Earnest Shackleton was a Kildare man and a great expedition leader



The Endurance was stuck in the ice for ten months before she was finally crushed to pieces by the pressure of the ice flow. The men rescued as much food and equipment as possible off the ship before she disappeared forever

Discover more about: Tom Crean



Tom is pictured here with four pups – Roger, Toby, Nell and Nelson – born on the Endurance shortly before she broke up. Crean was said to have been heart broken when the dogs had to be put down before the men set sail for Elephant Island



The launch of the James Caird on its epic journey from Elephant Island to South Georgia

proved to be an appalling voyage with freezing temperatures and gale force winds, the group reached Elephant Island. However, the island was remote, with little chance of rescue. Shackleton determined that he and five others, including Crean, should undertake a journey, sailing 800 miles in one of the boats, the *James Caird*, to the whaling stations on the island of South Georgia. The open boat journey to the island took seventeen days. They landed however on the south side of the island while the whaling stations were located on the north side.

On May 19th 1916 Shackleton, Crean and Worsley set out to cross South Georgia, no mean feat given that it was unmapped territory, with snow covered mountains reaching 3000 feet in height. They arrived at the whaling station, 36 hours later, having travelled without rest. Attempts to rescue the remainder of the men on Elephant Island were eventually successful in August 1916. Not a single life was lost.

Tom Crean had once again demonstrated his strength and bravery.



After 22 months trapped on Elephant Island, Shackleton's men were rescued at last and taken to Chile and safety on board The Yelcho



Q *Do you think Earnest Shackleton was happy when Tom agreed to be part of the Endurance Expedition? Why?*

Q *After the Endurance had broken up why did the men stay on the ice for six months before sailing their life boats to Elephant Island?*

Q *Do you know how Elephant Island got its name?*

Q *What do you think the men ate during their stay on Elephant Island?*

Q *The journey of the James Caird between Elephant Island and South Georgia is often described by historians and seafarers as 'one the greatest open boat voyages ever'. Do you agree? Why?*

LIFE AFTER ANTARCTICA

On his return from Antarctica, Crean served in the Naval bases at Chatham, Cobh and Berehaven, before retiring from the Royal Navy in 1920. In total he spent 27 years in the Navy, ten of which were spent on Antarctic expeditions.

Crean took time off during his posting at Bere Island to get married. His bride was Eileen Herlihy, but was always known as Nell. The marriage took place in Annascaul in 1917. Between 1918 and 1922, Tom and Nell had three children – Mary, Katherine and Eileen. Unfortunately, Kate died in 1924 at the age of four.

In 1927, Crean opened a pub in Annascaul and, in memory of his adventures in the Antarctic, named it the South Pole Inn. From then on, to the locals, the Crean's were affectionately known as 'Tom the Pole' and 'Nell the Pole'. Tom enjoyed his quiet life as a publican up to his death in 1938.

In Ireland recognition of Crean's heroism only came many years after his death. This was partly due to the fact that Tom was a gentle modest man who never boasted about his deeds. It was also because the Kerry man returned to a much changed, newly-independent country where feelings towards Irish men who had served in the British Royal Navy weren't particularly positive.

Internationally, Tom Crean's role in the 'heroic age of Antarctic exploration' has always been acknowledged. His name lives on in Antarctica in the form of a mountain and glacier that bear his name. Mount Crean is situated at about 77.90°S 159.47°W. It is a massive rocky mountain. One stone from this mountain is included in the box. Crean Glacier is on



Tom was a Warrant Officer by the time he retired from the Navy in 1920, the highest rank he could achieve

Discover more about: Tom Crean

South Georgia island at about 54.17°S 28.13°W. It is a 6km long active glacier.

In more recent times people in Ireland have taken a keen interest in his story. Many books have been written about him and he has featured in numerous TV documentaries. He even features in the history books of primary school students so now every school child in the country knows about Tom Crean and his expeditions.

He also has a special place in Kerry County Museum where an award-winning exhibition featuring many objects and artifacts associated with the great man are on permanent display.



Q *Tom named his pub the South Pole Inn. Can you think of any other great names he might have used?*

Q *Tom's medal for bravery was loaned to Kerry County Museum by his family. Do you think the Crean's made the right decision to loan this object to the Museum? Why?*

Q *Do you think Tom minded that he was not famous in Ireland? Why?*

Q *What do you think his reaction would be if he knew that his story would one day feature in schoolbooks and on TV?*