

THE RACE TO THE SOUTH POLE

CLASS 3 HANDOUTS

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Re phone, feel free to text at any time, or to call between 9 am and 9 pm. If you have a question or comment and wish a quick response, please text or call rather than sending me an email. Otherwise, email is fine.

HANDOUT CONTENTS

1) News from the Antarctic — p. 2

2) Class 3 Outline — p. 3

3) Key Participants — p. 4 – 5

First, includes photos of two men from the *Southern Cross* expedition, which I'll deal with briefly at the start of the Class 3 lecture. I've included Bernacchi principally because he's a link between the *Southern Cross* expedition and Scott's *Discovery*, having been in the wintering party on both. Second, there's a photo of the three men who participated in the crucial "Southern Journey" on the *Discovery* expedition. These are two of our Race Entrants, Scott and Shackleton, plus Edward Wilson who is a crucial supporting character in our story.

4) Timelines for Scott & Shackleton, 1868–1905 — pp. 6 – 17

a. Summary — pp. 6 – 8

As promised last week, this is a shorter version of the full timeline, though there's still quite a bit of detail. This summary version focuses on activity that involved Scott and Shackleton. Everything in the summary is also in the more extensive version. Take your choice as to which to look at — either, both, or neither!

b. Extensive Version — pp. 9 – 17

Provides additional detail re what's in the summary version plus entries about significant expedition activity entirely omitted from the summary version.

5) Maps — pp. 18 – 29

All included maps are specific to this class.

6) Selection of Edward Wilson's Expedition Paintings — pp. 30 – 41

Edward Wilson was on the *Discovery* expedition as the 2nd doctor, a back-up to senior expedition doctor Reginald Koettlitz. From the start, however, Wilson's duties also included being expedition artist. He was a very talented painter who would produce many wonderful works illustrating the magnificent Antarctic landscape. In addition, he became the official illustrator for the expedition newspaper, the *South Polar Times*. Included here is a small but representative selection of his large artistic production on the *Discovery* expedition.

NEWS FROM THE ANTARCTIC

Here's an article about a surprising and fascinating piece of news from the Antarctic this year. Yes, Antarctica is cold. And this year, in contrast to heat records in more northerly locations, new cold records are being set at the South Pole.

Link to the article (Hit control + a mouse click to follow the link)

<https://www.washingtonpost.com/weather/2021/10/01/south-pole-coldest-winter-record/>

My thanks to Doug Sheft, a student in our class who alerted me to this!

CLASS 3 OUTLINE

SCOTT & SHACKLETON: THEIR ANTARCTIC BAPTISM

- Brief Review of Class 2
- Today's Handouts
- Outline of Class 3 — What we'll be discussing today
- Carsten Borchgrevink and the 1898-1900 *Southern Cross* Expedition
- Scott and Shackleton — their backgrounds
- The 1901-1904 *Discovery* Expedition — Scott and Shackleton's Antarctic Baptism
 - Preparation and Personnel Selection
 - From England to Finding Winter Quarters on Ross Island
 - The 1st Winter — 1902
 - The Sledging Trip to the Farthest South — 1902-03
 - Shackleton's Departure for the North — 1903
 - The 2nd Summer, Scott's Trip to the Polar Plateau — 1903-04
 - Return to England and Scott's Reception — 1904-05

KEY MEN FOR CLASS 3



Carsten Brochgvink
From Norway
Southern Cross Leader
1864 – 1934



Louis Bernacchi
Italian-born Australian
Physicist on both *Southern Cross* &
Discovery
1876 – 1942

Borchgvink led the 1898-1900 *Southern Cross* expedition on which a ten-man party spent a winter in a hut at Cape Adare in 1899. This was the same location where Borchgvink and six other had made the first definite landing on the main Antarctic continent, in January 1895.

Louis Bernacchi had been fascinated with the Antarctic for years and was to have joined the *Belgica* expedition when she came to Australia after her first summer in the south. Because of her besetment, that didn't happen, but Bernacchi, still determined to go south, found a second opportunity with Borchgvink's *Southern Cross* expedition. As things developed, his relationship with Borchgvink was acrimonious, to say the least. Following his return home after the *Southern Cross* expedition, Scott invited him to join the *Discovery* expedition. Bernacchi accepted, becoming the only man with Scott who had previously been to the Antarctic. Bernacchi got along quite well with Scott, although there were occasional tensions between the two, particularly when Bernacchi offered advice based on his experience with Borchgvink.

One of Bernacchi's wintering companions on the *Southern Cross* expedition, William Colbeck, was also involved with *Discovery*, serving as captain of the relief ship *Morning*.



The Three Men of the *Discovery* Southern Journey — Nov 1902

Ernest Shackleton
Expedition 3rd Officer
1874 – 1922

Robert Falcon Scott
Expedition Leader
1868 – 1912

Edward Wilson
Expedition 2nd doctor & artist
1872 - 1912

CLASS 3 TIMELINE SUMMARY
SCOTT & SHACKLETON: THEIR ANTARCTIC BAPTISM
THE 1901 – 1904 *DISCOVERY* EXPEDITION

>>> THE YEARS BEFORE <i>DISCOVERY</i> <<<	
1868	Scott — Born in England, June 6, 3 rd of 6 children
1874	Shackleton — Born in Ireland, Feb 15, 2 nd of 10 children
1881	Scott — Age 13, joins Royal Navy as cadet
1890	Shackleton — Age 16, leaves school, joins merchant navy
1900	Scott — Jun, appointed commander of <i>Discovery</i> expedition
>>> THE <i>DISCOVERY</i> EXPEDITION — 1901 – 1904 <<<	
1901	
Feb	Shackleton named 3 rd officer of <i>Discovery</i>
Aug	6 — <i>Discovery</i> leaves England after royal send-off at Cowes, 50 men aboard
Nov	29 — Arrive Lyttelton, New Zealand; <i>Discovery</i> into drydock to hunt for/repair leak.
Dec	24 — Depart for Antarctic from Port Chalmers (seaport of Dunedin)
1902	
Jan	4-8 — Pass through ice pack into open waters of Ross Sea 9 – 29 — Land at Cape Adare, leave message for anticipated relief ship; explore southward along Victoria Land coast; leave message at Coulman Island; leave message at Cape Crozier; begin eastward sail along face of Ross Ice Shelf 30-31 — Sight land at extreme eastern reach of Ross Ice Shelf — Scott names it King Edward VII Land; turn back, sailing westward, still along ice shelf edge
Feb	3-4 — Enter “Balloon Bight,” bay in the ice shelf. Six men make overnight sledge trip south; on 4 th , balloon inflated. Scott goes up first, followed by Shackleton 8-9 — Reach McMurdo “Bay.” Next day, reach far southern end of Ross Island, choose location as place for winter station, which will be aboard the ship
Mar	4-19 — 1 st major sledge trip, 12-man party to Cape Crozier to leave message for a relief ship about where they are. One man dies after falling over an ice cliff in a blizzard
Apr	23 — Sun officially sets, winter night begins; first issue of <i>South Polar Times</i> presented to Scott
May - Aug	Settle into a winter scientific and life regime, including weekly lectures, concerts, preparation for upcoming spring and summer sledging Aug 21 — Sun rises, winter night over
Sept - Oct	Post-winter sledging begins, including successful trip to Cape Crozier to leave message for relief ship with <i>Discovery</i> ’s location. On this trip, Emperor penguin rookery discovered

Nov	<p><u>Scott / Shackleton / Wilson Southern Journey — 11/2/1902 – 2/3/1903</u></p> <p>2 — Scott, Shackleton, Wilson leave with 19 dogs</p> <p>13-15 — Nearly reach 79° S, setting a new farthest south; Supporting parties turns back; next day, dogs begin failing with excessively heavy loads</p> <p>21 — See continuous land to right of route, change direction toward it</p> <p>25 — Reach 80° S</p>
Dec	<p>1 — Reduce rations for 1st time</p> <p>25 — Enjoy Christmas day “feast”; Wilson concludes all showing signs of scurvy</p> <p>30 — Reach farthest south, est. 82° 16-17’S</p> <p>31 — Begin return trip, but first explore the vicinity</p>
1903	
Jan	<p>Dogs failing though month, not pulling, dying; men ravenously hungry</p> <p>7 — Give up completely on dogs, man-hauling rest of the way</p> <p>21 — Shackleton in bad shape, carried on sledge to control when use sail; at times, skis alongside</p> <p>23 — Relief ship <i>Morning</i> reaches McMurdo Sound, stopped 10 miles north of <i>Discovery</i> by impenetrable ice</p> <p>28 — Reach last depot, now plenty of food as well as news that <i>Morning</i> has arrived</p>
Feb	<p>3 — Reach <i>Discovery</i> which is still separated from <i>Morning</i> by 8 miles of ice</p> <p>Mid-month — Scott circulates offer for men to leave on <i>Morning</i>. Nearly all merchant seamen accept; Scott tells Shackleton that he will leave whether he wants to or not</p>
Mar	<p>2 — <i>Morning</i> leaves, taking 9 lower-deck men plus Shackleton</p>
Apr – Sept	<p>Work on equipment, planning, and preparing for new work the next summer; continue with scientific work programs</p> <p>Second week of Sept, resume sledging, beginning with several week plus trips</p>
Oct	<p>October through December, men of the <i>Discovery</i> expedition made four significant sledging trips, all entirely man-hauling efforts. All these trips were important, but Scott only personally involved in one — his Polar Plateau Trip, described below</p> <p><u>Scott’s Polar Plateau Trip — Oct 12 - Dec 24</u></p> <p>12-21 — Scott leaves with 12 men for trip to explore Polar Plateau, first reached the previous summer by Armitage; on 18th, turns back because of sledge runner problems, back at <i>Discovery</i> on the 21st</p> <p>26 — 2nd departure, this time with 9 men</p>
Nov	<p>3 — Reach 3,000 feet</p> <p>4-10 — Tentbound by blizzard at what Scott calls “Desolation Camp”</p> <p>13 — Reach 8,900, close to where Armitage turned back the previous summer</p> <p>22 — Scott splits party into 2 three-man teams; one begins return while Scott continues westward on plateau with Lashly and Evans</p>

	30 — Scott's three reach 9,000 feet at estimated 77° 59' S —short of food, time to return
Dec	1–14 — Heading toward edge of Plateau, uncertain of where they are, short of supplies, very hungry; 14 th , reach edge of Polar Plateau, then depot at end of travel day 24 — Reach <i>Discovery</i> — last of summer sledging trips to return
1904	
Jan	5 — Relief ships <i>Morning</i> and <i>Discovery</i> reach the ice edge at the north end of McMurdo Sound, 20 miles of ice separating them from <i>Discovery's</i> position; Scott learns that <i>Discovery</i> is to be abandoned if she cannot be freed From here to end of January, work blasting the ice at the seaward edge; some ice going out 31 — Swell felt at <i>Discovery</i> , relief ships now within 8 miles
Jan	14 — Relief ships reach <i>Discovery</i> 16 — <i>Discovery</i> freed by one last explosive charge; Erect cross to only man to die on expedition, George Vince, on prominent rise next to Discovery Hut 19 — All three ships sail north
Feb – Apr	On way north, Scott does a bit of exploration along the coast of Antarctica to NW of Cape Adare Apr 1 — Reach Lyttelton, NZ, where remain for next several months
Sept	10 — <i>Discovery</i> reaches England. Greeted with great acclaim. Shortly after arrival, Scott promoted to Captain
1905	
	<i>Discovery</i> sold to Hudson's Bay Company Scott publishes <i>The Voyage of the Discovery</i> , instant best seller

CLASS 3 TIMELINE DETAIL
SCOTT & SHACKLETON: THEIR ANTARCTIC BAPTISM
THE 1901 - 1904 *DISCOVERY* EXPEDITION

>>> THE YEARS BEFORE <i>DISCOVERY</i> <<< SCOTT & SHACKLETON: THEIR EARLY YEARS THE <i>SOUTHERN CROSS</i> EXPEDITION			
	Scott & Shackleton	<i>Southern Cross</i>	<i>Discovery</i> Preparation
1868	Scott — Born in England, June 6, 3 rd of 6 children		
1874	Shackleton — Born in Ireland, Feb 15, 2 nd of 10 children		
1881	Scott — Age 13, joins Royal Navy as cadet		
1890	Shackleton — Age 16, leaves school, goes to sea in merchant navy		
1897		Sir George Newnes provides £40,000 to fund the expedition	British Scientific societies agree to mount an Antarctic expedition
1898		July — <i>Southern Cross</i> leaves England Dec — Depart Hobart, Tasmania, for the south	
1899	Scott — Jun, applies to command the <i>Discovery</i> expedition	Feb — <i>Southern Cross</i> reaches Cape Adare, lands 10-man wintering party; hut built Mar — <i>Southern Cross</i> leaves for winter in north Rest of year, explore Robertson Bay area Oct — Biologist Hanson dies	Mar — Longstaff donates £25,000 to expedition Jun — Govt grants £40,000 for the expedition Sept-Oct — Agreement at 7 th International Geographical Congress that British expedition will go to the Ross Sea
1900	Scott — Jun, appointed commander of <i>Discovery</i> expedition — Visits Norway, meets with Nansen for advice	End Jan — Ship returns, picks up shore party Feb — Sail south, explore Victoria Land coast, land	Mar — <i>Discovery</i> keel laid Officers begin to be appointed

	Shackleton — On voyage to South Africa on Boer War troopship, meets Cedric Longstaff — son of man who is expedition’s largest private donor	on Ross Island, sail along face of Ross Ice Shelf. Land on ice shelf, short sledge trip End March — Reach New Zealand	
>>> THE <i>DISCOVERY</i> EXPEDITION — 1901 – 1904 <<< SCOTT & SHACKLETON’S ANTARCTIC BAPTISM			
1901			
Jan	Albert Armitage — man with Arctic polar experience — appointed 2 nd -in-command Edward Wilson appointed as 2 nd surgeon, also to be a naturalist and artist		
Feb	On recommendation of Cedric Longstaff’s father, Shackleton named 3 rd officer of <i>Discovery</i>		
Mar	<i>Discovery</i> launched at Dundee, Scotland		
Aug	6 — <i>Discovery</i> leaves England after royal send-off at Cowes 15 — Stop at Madeira, shore excursions — shortly after leaving, <i>Discovery</i> starts leaking		
Sept	13 — Short stop and landing at South Trinidad, collect specimens		
Oct	3 — Reach Cape Town; four men discharged, replacements taken on 14 — Leave Cape Town en route to New Zealand, far southerly route for magnetic observations		
Nov	15 — Cross 60° S, still having seen no ice 16 — See first sea ice; by afternoon, loose floes all about; this day, reach 62° 50’ S, farthest south until leave New Zealand for the Antarctic 22 — Land on Macquarie Island, see first penguin (Royal and King) rookeries 29 — Arrive Lyttelton; <i>Discovery</i> into drydock to hunt for/repair leak — For next 3 weeks plus, take on stores; pick up dogs, check instruments. . . — Bernacchi, veteran of the <i>Southern Cross</i> expedition, arrives and joins scientific staff		
Dec	21 — Depart Lyttelton in grand sendoff, heading for Port Chalmers; Charles Bonner falls from mainmast, dies 24 — Depart for Antarctic from Port Chalmers		
1902			
Jan	3 — Meeting loose ice pack; Cross Antarctic Circle 4 — Enter ice pack, at 67° 18’S 8 — Clear pack, into open waters of Ross Sea 9 — Land at Cape Adare, leave message for planned relief ship 15 — Land at Coulman Island, leave 2 nd message for relief ship 19 — Discover Drygalski Ice Tongue –1 st major discovery; skies so clear can see Mt Erebus, still 120 miles away — After passing Drygalski Ice Tongue, begin searching for a place for the ship to winter		

	<p>22 — Land at Cape Crozier, leave 3rd message for relief ship — message only says they have come this way, nothing about where they will winter since do not yet know — Leave Cape Crozier, head eastward along face of Ross Ice Shelf</p> <p>26 — Reach farthest south of expedition, 78° 36' S, after sailing up an inlet in the ice shelf that Scott names “Discovery Inlet”</p> <p>30 — Sight land at extreme eastern Ross Ice Shelf — Scott names it King Edward VII Land</p> <p>31 — Turn back, sailing westward along the ice shelf</p>
Feb	<p>2 — Scott outlines a three-year program to the officers, including going to McMurdo Bay (as then known), find a place for the ship to winter there</p> <p>3–4 — Enter a bay in the ice shelf that Scott names “Balloon Bight.” Several men land on the ice shelf. Armitage & Bernacchi with 4 others set off on overnight sledge trip, reach 18 miles farther south than had been reached on the <i>Southern Cross</i> expedition, a new “farthest south” On 4th, full party lands the balloon equipment; Scott goes up first, then Shackleton, reaching 800 feet above the surface</p> <p>8 — Reach McMurdo “Bay,” head south along west coast of Ross Island</p> <p>9 — Reach far south end of Ross Island, decide will winter here, living aboard the ship; begin erecting Discovery Hut and smaller structures for scientific work on shore</p> <p>19–22 — Shackleton, Wilson, Ferrar sledge to White Island, 1st expedition sledging trip</p>
Mar	<p>4 — Windmill intended to generate electricity erected on the ship</p> <p>4–19 — 1st major sledge trip of expedition, 12-man party to Cape Crozier to amend original message with new one saying where they are 9 — Nine men and the dogs turn back, three men continuing on skis 11 — The 9 who have turned back attempt to reach <i>Discovery</i> in a blizzard; one man (George Vince) slides over a cliff, lost – 1st (and only) death on the expedition in the Antarctic; several others nearly lost, but ultimately all reach the ship safely 13–19 — The 3 who continued near but cannot reach Cape Crozier; turn back on 15th and reach the ship on the 19th</p> <p>24 — <i>Discovery</i> begins to be frozen in, in Winter Quarters Bay just off shore; for 1st time, able to walk to shore from the ship over the ice</p> <p>31– Apr 3 — Last sledge trip of fall</p>
Apr	<p>23 — Sun officially sets, winter night begins — First issue of <i>South Polar Times</i> presented to Scott Shackleton is the editor and typist, Wilson doing most of the illustrations. Single typewritten copy that Scott reads first, then is passed around for everyone to read</p>
May	<p>2 — Windmill finally breaks down for good</p> <p>First use of hut as theater, a concert arranged by Lt Royds</p> <p>During month — first use of Discovery Hut as a theater, concert arranged by Lt. Royds — Settle into regime, including scientific work, weekly lectures, concerts, preparing for upcoming spring and summer sledging</p>

June	23 — Celebrate mid-winter solstice 25 — Play, “Ticket of Leave,” performed in the “Royal Terror Theater” [i.e., Discovery Hut]	
July	Scientific work, lectures, etc. continue; Scott plans for the coming summer work	
Aug	6 — “Nigger Minstrel Troupe” in Discovery Hut – outdoor temp -40° 21 — Sun rises, winter night over 26 — Last (5 th) issue of South Polar Times for the year	
Sept	Post-winter sledging begins, initially with short depot laying and recon trips, many of the men involved [Only some of the longer trips specifically noted below] 11–26 — Armitage leads 6-man party recon trip to find way into the mountains to west of McMurdo Sound 1 st attempt to pull sledges while on skis. On return on 26 th , Wilson diagnoses scurvy among men who had been on the trip 24–Oct 3 — Scott, Shackleton, and a sailor make second southern recon	
Oct	3 — Scott back from his trip, learns about scurvy diagnosis, joins with doctors and Armitage in taking steps to combat it; orders hunting trip for seals for meat 4–24 — Six-man Sledge trip to Cape Crozier to leave message about <i>Discovery</i> ’s location for relief ship, amending original one left in January 10–18 — At Cape Crozier, discover an Emperor Penguin rookery, 1 st one ever seen; successfully leave the message 24 — back at <i>Discovery</i> 30 — Supporting party for far southern trip leaves Hut Point, 12 men man-hauling	
Nov	Far Southern Journey	Other Expedition Activity
	2 — Scott, Shackleton, Wilson leave with 19 dogs; same day, catch up with supporting party 10 — Reach depot set up by earlier sledge trip 13 — Nearly reach 79° S, a new farthest south; half of supporting party turns back 15 — rest of supporting party turns back 16 — begin relaying because dogs cannot handle the now much heavier loads (have added supporting party loads) 17 — Men join dogs in harness for 1 st time 19 — Sight previously unknown land to SW 21 — See continuous land to right of route, change direction to toward it, in part to leave a depot to lighten load 25 — Reach 80° S	2–17 — Royds and two others make a 2 nd trip to Cape Crozier; find intact Emperor Penguin egg, bring back to ship 22–23 — Southern Journey supporting parties reach <i>Discovery</i> <div style="text-align: center; background-color: #e0e0e0;">Armitage Plateau Trip</div> 29 — Armitage departs leading 21-man group (incl. 9-man support party) —

		purpose to head into mountains to west of McMurdo Sound
Dec	<p>1 — Reduce rations for 1st time</p> <p>5 — Reduce oil consumption – means cold mid-day meal and less liquids, possible dehydration</p> <p>10 — First dog dies, feed him to the other dogs</p> <p>16 — Leave some food at a depot, lightening load enough to end relaying; men growing more and more ravenous as set out from depot with 4 weeks of man food, minimal dog food, limited clothing</p> <p>19 — At end of day, are only 10 miles from land; now down to 15 dogs</p> <p>21 — 14 dogs left; Wilson tells Scott that Shackleton is showing signs of scurvy</p> <p>25 — Enjoy Christmas day “feast”; Wilson examines all three, concludes all have signs of scurvy</p> <p>28 — Scott’s observation puts them at 82° 11’ S [modern estimate based on photos, 82° 5’ S];</p> <p>30 — Scott and Wilson ski to est. 82° 16-17’ S, leaving Shackleton behind to care for the dogs</p> <p>31 — Begin return trip, but first exploring the immediate area</p>	<p>7 — Reach about 5,000 feet</p> <p>10 — Supporting party turns back, 12 men go on</p> <p>12 — Reach 6,000 feet</p> <p>16 — Recon of “Descent Pass,” descend</p> <p>17 — Down onto Ferrar Glacier, to 2,000 feet</p> <p>18 — Begin climbing Ferrar Glacier</p> <p>25 — Armitage examines team for scurvy. Finds several men with symptoms, decides not too bad, goes on</p> <p>31 — Difficult climb up ice-falls. End of day, reach polar plateau, at 7,500 feet</p>
1903		
Dec	<p>1 — Full return begins; for 1st time, try using a sail on the sledge</p> <p>Dogs failing more and more, men ravenously hungry</p> <p>7 — Finally give up completely on dogs, take all out of harness, man-hauling rest of the way</p>	<p>2 — One man collapses from altitude sickness; Armitage splits group, leaves 6 men including collapsed one, to camp, continues with other 6. Reach 8,200 ft.</p> <p>4 — The 6 men reach what Armitage decides will be last camp, at 8,900 ft. In every westward direction, see only a level plateau</p> <p>5 — Ski westward five miles, reach 9,000 ft, fully onto polar plateau; are 100 miles from coast, 134 miles from <i>Discovery</i>; next day, begin return</p> <p>7 — All 12 men now together, together return to <i>Discovery</i></p>

	<p>10 — For 1st time, travel in a blizzard; use sail again; unsure where they are since sledgometer broken</p> <p>12 — Concerned that might not be able to find their scantily marked depot</p> <p>14 — Reach depot very early in AM Wilson concludes all definitely have scurvy. Shackleton worst off, scurvy signs intensifying and terribly tired at end of each day's travel. Before leaving depot, reorganize sledge load and abandon everything they think non-essential including all skiing gear except for one set kept for emergencies</p> <p>15 — Kill last two dogs, leave carcasses w/o eating Scott decides that Shackleton should not work, let the others do nearly everything including pulling sledge; Shackleton for most part to walk or skis alongside</p> <p>20 — Weather clears for 1st time in days, can see Mt. Discovery just above horizon</p> <p>21 — Shackleton carried on sledge to control it as use sail; at times, skis alongside</p> <p>28 — Reach last depot, now plenty of food, as well as news that <i>Morning</i> has arrived</p> <p>29 — Tentbound for day by blizzard; Shackleton in very bad shape</p> <p>30 — Shackleton again carried on sledge, or riding to help control when using sail</p>	<p>16 — Reach foot of Descent Pass, climb back up before they can go back down the way they came up first</p> <p>19 — All safely back at <i>Discovery</i> >>> Plateau Trip End <<<</p> <p>23 — Relief ship <i>Morning</i> arrives, stopped by ice 10 north of <i>Discovery</i></p> <p>24 — Men from Hut Point sledge out to the <i>Morning</i> over the ice, spend night because ice too rotten to trust with heavy sledges loaded with things from <i>Morning</i></p> <p>25 — <i>Discovery</i> men return to Hut Point with mail, etc. Sledge stores and mail to Scott's last depot, where Scott et al. will find it on the 28th</p>
<p>Feb</p>	<p>2 — Ross Island in sight, all three nearly done in</p> <p>3 — Reach <i>Discovery</i> >>> End of Southern Journey <<<</p> <p>12 — Scott & Colbeck (Capt. of <i>Morning</i>) decide <i>Morning</i> should delay departure in hope ice will go out. But in case it does not, begin transferring new stores from <i>Morning</i> to <i>Discovery</i></p>	<p>3 — <i>Morning</i> still separated from <i>Discovery</i> by 8 miles of ice</p>

	Mid-month — Scott circulates offer for men to leave on <i>Morning</i> .. Nearly all merchant seamen accept offer; Scott tells Shackleton that he will leave whether he wants to or not
Mar	2 — <i>Morning</i> leaves, taking 9 lower-deck men plus Shackleton, the only officer/staff member who leaves. Replacement officer from <i>Morning</i> , Mulock, transfers to shore party. 14 — Scott abandons fleeting hope that <i>Discovery</i> will be freed, begins preparations for 2 nd winter
Apr	10 — Test acetylene gas system, find it works well providing light – tho not available in cabins
May – Aug	Resume South Polar Times, now edited by Bernacchi Work on equipment, planning, preparing for new work the next summer — time spent much as during previous winter including continuing scientific work
Sept	Second week of month, resume sledging, beginning with several week plus trips including depot laying trips for upcoming longer trips 9–17 — Wilson leads 6-man team to Cape Crozier to visit the Emperor rookery to collect eggs, chicks if possible — return with both eggs and chicks
Oct	<p style="text-align: center;">October through December, men of the <i>Discovery</i> expedition made several significant sledging trips, all entirely man-hauling efforts</p> <ol style="list-style-type: none"> 1) Scott’s Plateau Trip — Oct 12 to Dec 24 — The longest and most significant of the trips from an exploration perspective. On this, Scott follows up on Armitage’s sledging exploration to the polar plateau during the previous summer 2) Wilson’s 2nd trip to Cape Crazier to study Emperor penguins — Oct 10 to 5 — Wilson leads a three-man group as a follow up to his September visit to spend more time with the Emperors. A desire to do even more will be one of Wilson’s motivations for returning to Antarctica with Scott on the <i>Terra Nova</i> expedition. 3) Barne and Mulock’s Survey of the west coast of the Ross Ice Shelf — Oct 6 to Dec 16 — Barne and Mulock lead a six-man team southwest from Ross Island to about 80° S (approx.. 140 miles south of Hut Point), conducting a careful survey of land west of the ice shelf between Hut Point and 80° S. One important result of trip, discovery that ice of the ice shelf was moving northward 4) Royds and Bernacchi’s Survey trip southeastward on the Ross Ice Shelf — Nov 10 to Dec 10 — Six-man team under Royds explores and surveys the Ross Ice Shelf to southeast of Ross Island, into entirely unexplored area to a point where no land is visible in any direction. Turn back after reaching nearly 80° S, 178 miles from Hut Point. <p>All these trips were important and each produced significant findings, but Scott was only personally involved in the first, his Plateau Trip. The timeline below only provides detail for this one of these four trips.</p> <p style="text-align: center;">SEE MAP 10 FOR THE ROUTES OF EACH OF THESE TRIPS.</p> <p>12 — Scott leaves for his Plateau trip with three parties: 1) own 6-man team; 2) 3-man support party; 3) Ferrar’s 3-man geological party</p> <p>16–21 — Scott reaches, picks up spring depot. On 18th, turns back due to sledge runner problems. Creates depot of loads carried to point where turns back. Reaches <i>Discovery</i> on 21st.</p> <p>26 — 2nd departure from <i>Discovery</i>, now without support party</p>
	1 — Reach depot where dropped loads, find <i>Hints to Travelers</i> with its crucial navigation tables missing

Nov	<p>3 — Reach 7,000 feet</p> <p>4–10 — Tentbound by blizzard at what Scott calls “Desolation Camp”</p> <p>11 — Leave Desolation Camp to continue; Ferrar’s 3-man team splits off</p> <p>13 — Reach 8,900 feet by end of day — at or near summit, close to where Armitage turned back the previous summer</p> <p>20 — Begin relaying sledges because several men, exhausted, having trouble pulling. Scott puts all six men on one, then going back for the other</p> <p>22 — Scott splits party into 2 three-man teams; one begins return while Scott continues onward farther westward on plateau with two men from the “lower deck,” Stoker William Lashly and Petty Officer Edgar Evans</p> <p>30 — Scott’s three at estimated 77° 59’ S — now short of food, decide to return</p>	
Dec	<p>1 —Begin return</p> <p>2 – 13 — Heading toward edge of Plateau, mostly gloomy weather, uncertain of where they are, short of supplies, very hungry</p> <p>14 — Reach edge of Polar Plateau, glacier downward facing them, accidentally slide down the slope in wild rush. At end of slide, can see where they are — know depot is near, reach it at end of travel day</p> <p>16 — Reach next, much larger, depot — now have ample food</p> <p>18 — Exploring as heading toward <i>Discovery</i>, discover “Dry Valley” [one of many that will be found later on the <i>Terra Nova</i> expedition in the McMurdo area; this one later named Taylor Dry Valley]</p> <p>24 — Reach <i>Discovery</i> —last of summer sledging trips to return</p> <p>31 — Scott visits sawing camp to see how things are progressing — realizes that very little has been accomplished</p>	<p><u>Other Activity While Scott Out on Plateau Trip</u></p> <p>As December begins, there are still 20 miles of ice between <i>Discovery</i> and open water. Before leaving on his sledge trip, Scott leaves orders that if the ice had not gone out by mid-December, work should start to saw a channel through the ice to free the ship.</p> <p>15 — Sawing work to create such a channel begins— from a location where a sawing tent is set up about half-way between <i>Discovery</i> and open water.</p>
Jan	<p>1 — Scott with Royds and Wilson sledge out to edge of the McMurdo Sound ice, can see that a full 20 miles still separates <i>Discovery</i> from open water</p> <p>2 — Scott calls off the sawing effort</p> <p>3 — Most men from the sawing camp sent back to <i>Discovery</i>; Scott and Wilson set off on a trip together just to relax</p> <p>4 — Scott and Wilson camp at a newly found Adélie rookery, at a place they name “The Skuary” [where 4 years later, Shackleton will establish his base for the <i>Nimrod</i> expedition and rename the location Cape Royds]</p> <p>5 — Relief ships <i>Morning</i> and <i>Terra Nova</i> reach the ice edge at the north end of McMurdo Sound; Scott learns that <i>Discovery</i> is to be abandoned if she cannot be freed</p> <p>6 — First sledge team from <i>Discovery</i> reaches the relief ships</p>	

	<p>18 — First large bits of ice break free from seaward edge of ice in McMurdo Sound, first indication of hope</p> <p>From here to end of January, work on blasting the ice at the seaward edge; ice gradually going out</p> <p>30 — Relief ships now within 8 miles of <i>Discovery</i></p> <p>31 — Feel <i>Discovery</i> move, a swell — relief ships now south of Glacier Tongue</p>
Feb	<p>5 — Scott orders blasting begin at <i>Discovery</i></p> <p>9 — Still six miles of ice separating ships</p> <p>11 — Scott, now assuming <i>Discovery</i> will be freed, issues sailing orders</p> <p>14 — Relief ships reach <i>Discovery</i></p> <p>16 — <i>Discovery</i> finally fully freed by one last explosive charge</p> <p>— Erect cross to the lost seaman Vince, on prominent rise next to Discovery Hut</p> <p>17 — <i>Discovery</i> sails out of Winter Quarters Bay, nearly wrecked before getting fully into McMurdo Sound</p> <p>19 — All three ships sail north, initially together</p> <p>24 — <i>Discovery</i> reaches Cape Adare, repair damaged rudder</p> <p>25 — Leave Cape Adare, do a final bit of exploration along coast of continent NW of Cape Adare</p>
Mar	<p>5 — <i>Discovery</i> leaves coast of Antarctica, heads for rendezvous with relief ships in the Aucklands</p> <p>15-20 — The three ships reach the Aucklands</p> <p>29 — All three ships leave Aucklands together</p>
Apr	<p>1 — All three ships reach Lyttelton, NZ</p>
May	<p>Scott and men of <i>Discovery</i> in New Zealand</p>
June	<p>8 — <i>Discovery</i> sails from Lyttelton, heaving for England westward, doing magnetic survey across Pacific with much of voyage between 56° and 60° S, then through Strait of Magellan.</p>
Sept	<p>10 — <i>Discovery</i> reaches England</p> <p>15 — Greeted with celebration at East India docks, Shackleton there</p> <p>Shortly after reaching England, Scott promoted to Captain</p>
<p>1905</p>	
	<p>King creates Antarctic version of the Polar Medal, awarded to nearly all members of the expedition</p> <p><i>Discovery</i> sold to Hudson's Bay Company</p> <p>Armitage publishes his expedition account, <i>Two Years in the Antarctic</i></p> <p>Scott publishes <i>The Voyage of the Discovery</i>, instant best seller</p>

MAPS

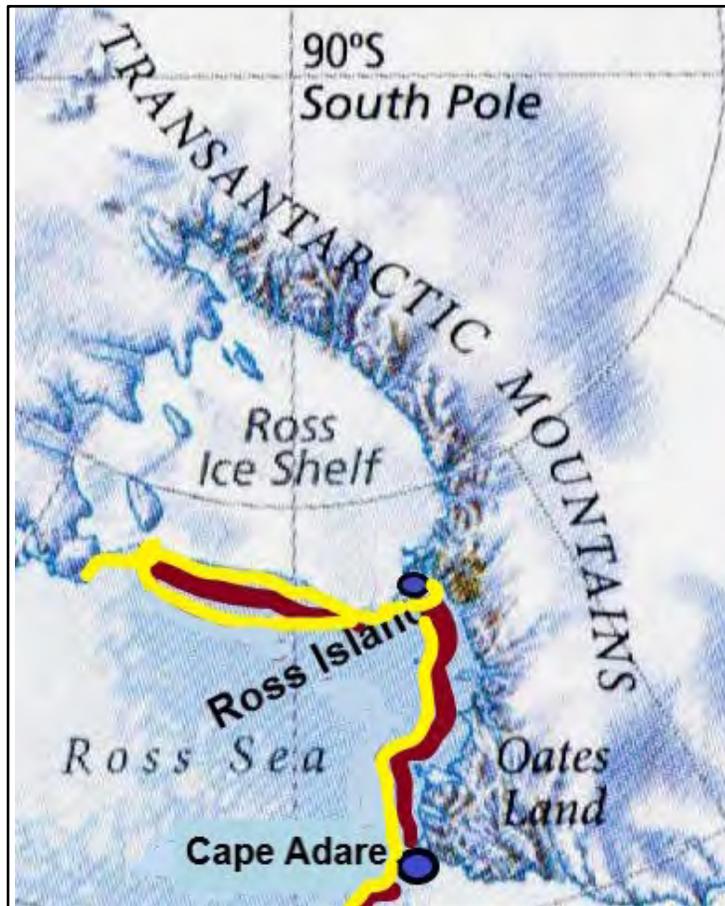
- 1) Location of Amundsen's Apprenticeship on the *Belgica* and Scott/Shackleton on the *Discovery*
- 2) A Closer Look at the Ross Sea Region and Summary Tracks of the *Southern Cross* and *Discovery* Expedition voyages
- 3) The *Southern Cross's* Voyage from Feb 2 – 17, 1900
- 4) The Three Cooperating Antarctic Expeditions in 1901-1904
- 5) 1905 Map Showing the Voyages of the ship *Discovery* in 1901-02 & 1904 as well as the track of Scott's Southern Journey
- 6) The *Discovery's* 1902 and 1904 Voyages
- 7) Where Scott Found His Winter Home
- 8) The Southern Journey — What Was Known Before and Afterward
- 9) Scott's Two Major Sledging Trips
- 10) The Four Major Sledging Trips of the *Discovery* Expedition Austral Spring/Summer 1903
- 11) The Ice Situation Between the *Discovery* and the Relief Ships *Morning* and *Terra Nova* When they Arrived on January 5, 1904



MAP 1 — Location of Amundsen's Apprenticeship and Scott/Shackleton Baptism

Amundsen's introduction to the Antarctic took place entirely in the Peninsula Region and/or the Bellingshausen Sea, far from the locale of the final Race to the South Pole. In contrast, Scott and Shackleton received their Antarctic baptism in the Ross Sea Region, in the precise locations where they would make their attempts to reach the South Pole on their next expeditions to the Antarctic.

The *Southern Cross* expedition, which will be covered briefly in Class 3, preceded *Discovery* in much of the same area three years earlier.



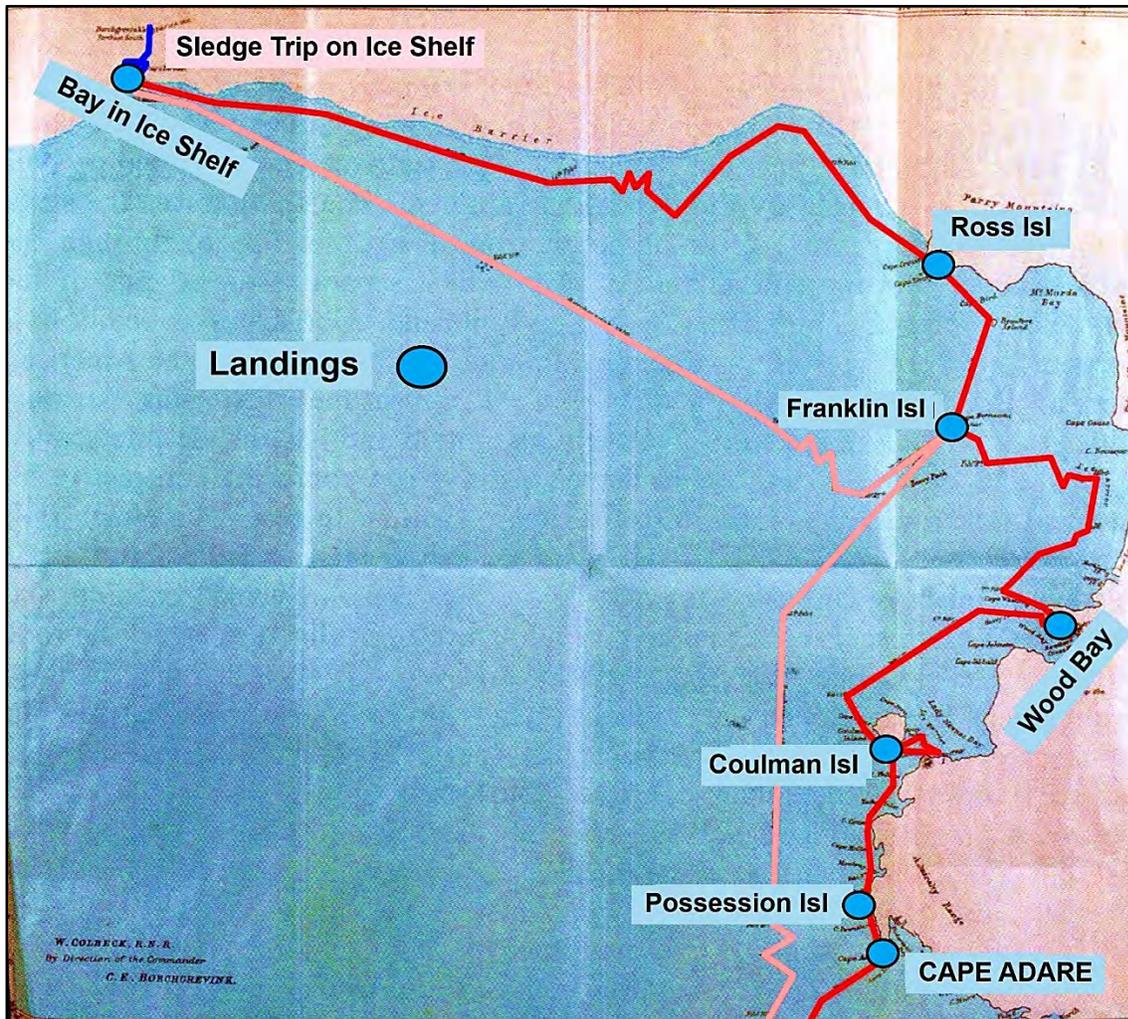
MAP 2 — A Closer Look at the Ross Sea Region and the Tracks of the *Southern Cross* and *Discovery*

Track shown for *Southern Cross* [in maroon] is for the southward 1900 voyage; that for *Discovery* [in yellow] for the 1901-02 voyage

As this map shows, the routes of these two expeditions were very similar for the parts of their voyages shown. In effect, Borchgrevink led the way for Scott.

Southern Cross — Carsten Borchgrevink's 1898-1900 *Southern Cross* expedition sailed from Tasmania at the end of 1898 and found a home for a 10-man wintering party at Cape Adare. The ship then sailed north for winter 1899, returning in January 1900 to pick up the shore party. Before heading back north, Borchgrevink sailed south along the west coast of the Ross Sea, then eastward along the face of the Ross Ice Shelf to a small bay where he landed. See Map 3, below, for more detail.

Discovery — Scott's 1901-04 *Discovery* expedition left New Zealand in late December 1901. The first stop was at Borchgrevink's Cape Adare wintering site. Scott then headed south along the coast of Victoria Land as Borchgrevink had done, turned eastward on reaching Ross Island, and sailed along the Ross Ice Shelf. He continued farther than Borchgrevink, discovering what he named King Edward VII Land at the extreme eastern end of the ice shelf. He then turned back westward and landed at the same bay as Borchgrevink. From there, Scott continued westward until reaching Ross Island, where he found a winter home for his ship at the southern end of McMurdo Sound.

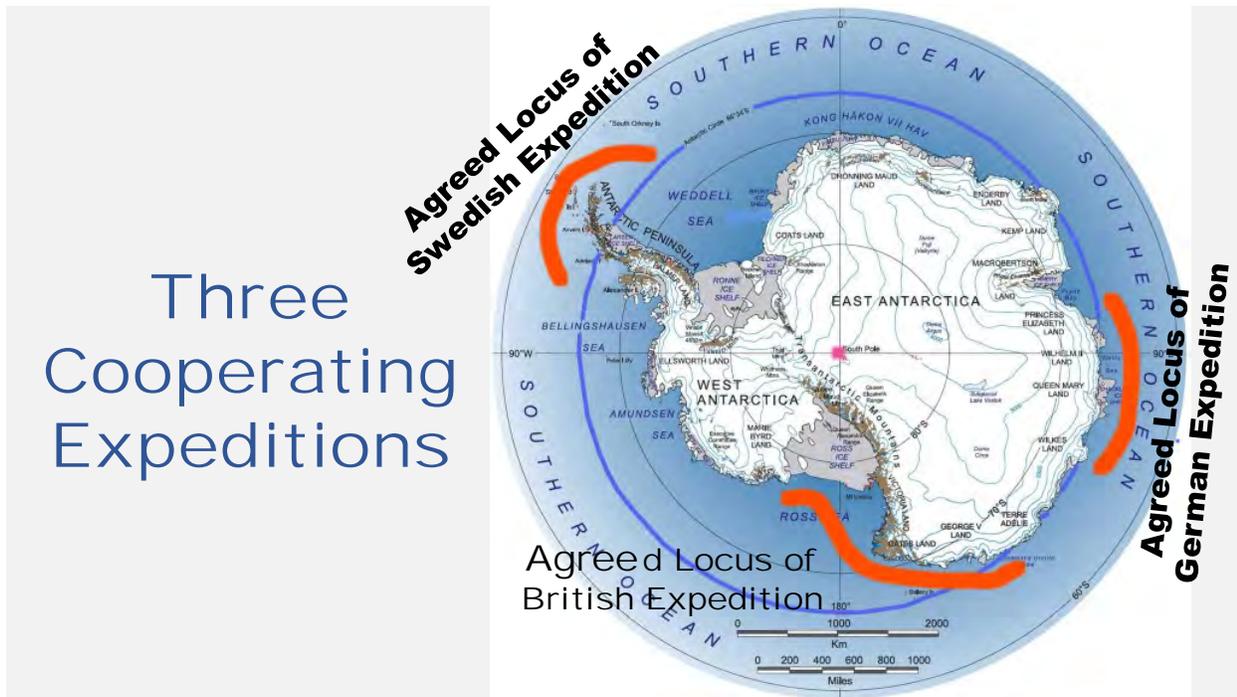


MAP 3 — The *Southern Cross's* Voyage from Feb 2 – 17, 1900
Red line is southbound voyage; pink, northbound

William Colbeck's voyage chart, reflecting what was known of the region at the time, much of it a result of work of this expedition. Note that Colbeck does not recognize Ross Island as an island, instead showing *McMurdo Sound* — to the right of the circle indicating the landing site on Ross Island — as a bay in the ice shelf or adjacent land.

As noted in the text for the previous map, Borchgrevink took his ship south for exploration in 1900 before he left the Antarctic. On this voyage, he sailed as close to the coast of Victoria Land as the ice allowed, determined an estimated position for the South Magnetic Pole, and made several landings on both the mainland and on islands. This included the first ever landing on Ross Island.

Borchgrevink's eastward sail along the Ross Ice Shelf was much closer to the ice cliff face than Ross had been. He ended his eastward sail at a small bay that he thought was the same one that Ross had seen and described. Here the entire ship party landed, the first landing on the iceshelf. A small group also made a brief sledge trip south on the ice shelf, another first.



MAP 4 — The Three Cooperating Antarctic Expeditions in 1901-1904

By 1897, it was known that both Britain and Germany were making plans to send an expedition to the Antarctic at the start of the 20th century. Both these efforts had at least some official status as government supported or sponsored expeditions. At the 7th International Geographical Congress in 1899, discussions took place that resulted in expedition organizers agreeing to make coordinated observations as well as designating where each expedition would work in the Antarctic. Britain claimed the Ross Sea Region while Germany took on a part of East Antarctica.

A third expedition in the same period entered the picture when Swedish geologist Otto Nordenskjöld put together a private venture. He agreed to participate in the coordinated observations and accepted the Peninsula Region (which was where he wanted to go anyway) as his work area.

There were also two other expeditions in the south for the latter part of the same time, but neither was involved in the cooperating/coordinated work program. These two came from Scotland and France, both as private ventures organized by their leaders.

Thus, for the years 1901–1905 the following all working in the south:

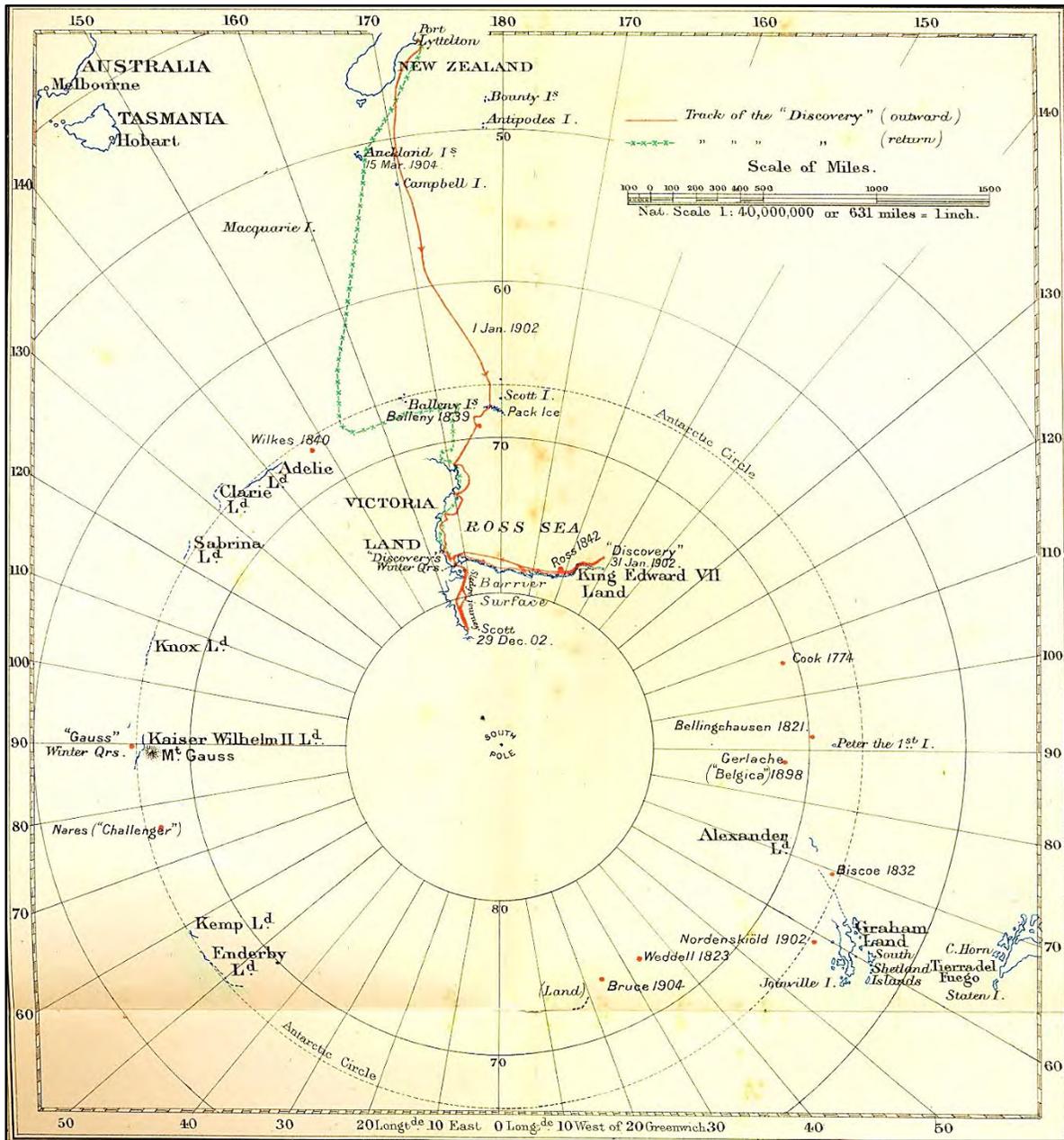
From Britain: *Discovery*, led by Robert Falcon Scott, 1901- 04 — in Ross Sea Regions

From Germany: *Gauss*, led by Erich von Drygalski, 1901-03 — East Antarctica

From Sweden: *Antarctic*, led by Otto Nordenskjöld, 1901-03 — Peninsula Region

From Scotland: *Scotia*, led by William Speirs Bruce, 1902-04 — Peninsula Region

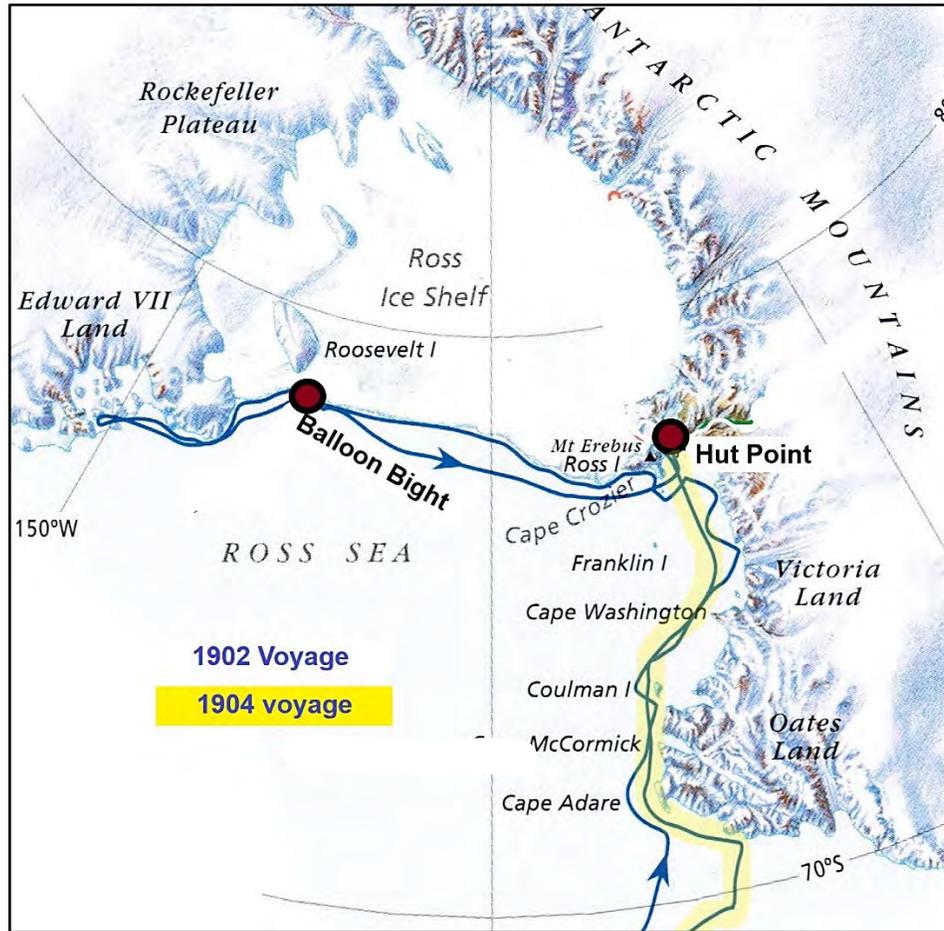
From France: *Français*, led by Jean Baptiste Charcot, 1903-05 — Peninsula Region



MAP 5 — 1905 Map Showing the Voyages of the ship *Discovery* in 1901-02 & 1904 as well as the track of Scott's Southern Journey

This isn't a great map for purposes of seeing what was done and where on the *Discovery* expedition. See maps below for that. This map, however, has real value. It was published in 1905 and includes the exploration results from all the expeditions up to that date. As you can see, the vast majority of the Antarctic coast is still a blank, a mystery yet to be solved. As for the interior beyond the known coasts, all that is known is comes from sledge trips on Scott's *Discovery* expedition. No one else has penetrated the interior more than a few miles.

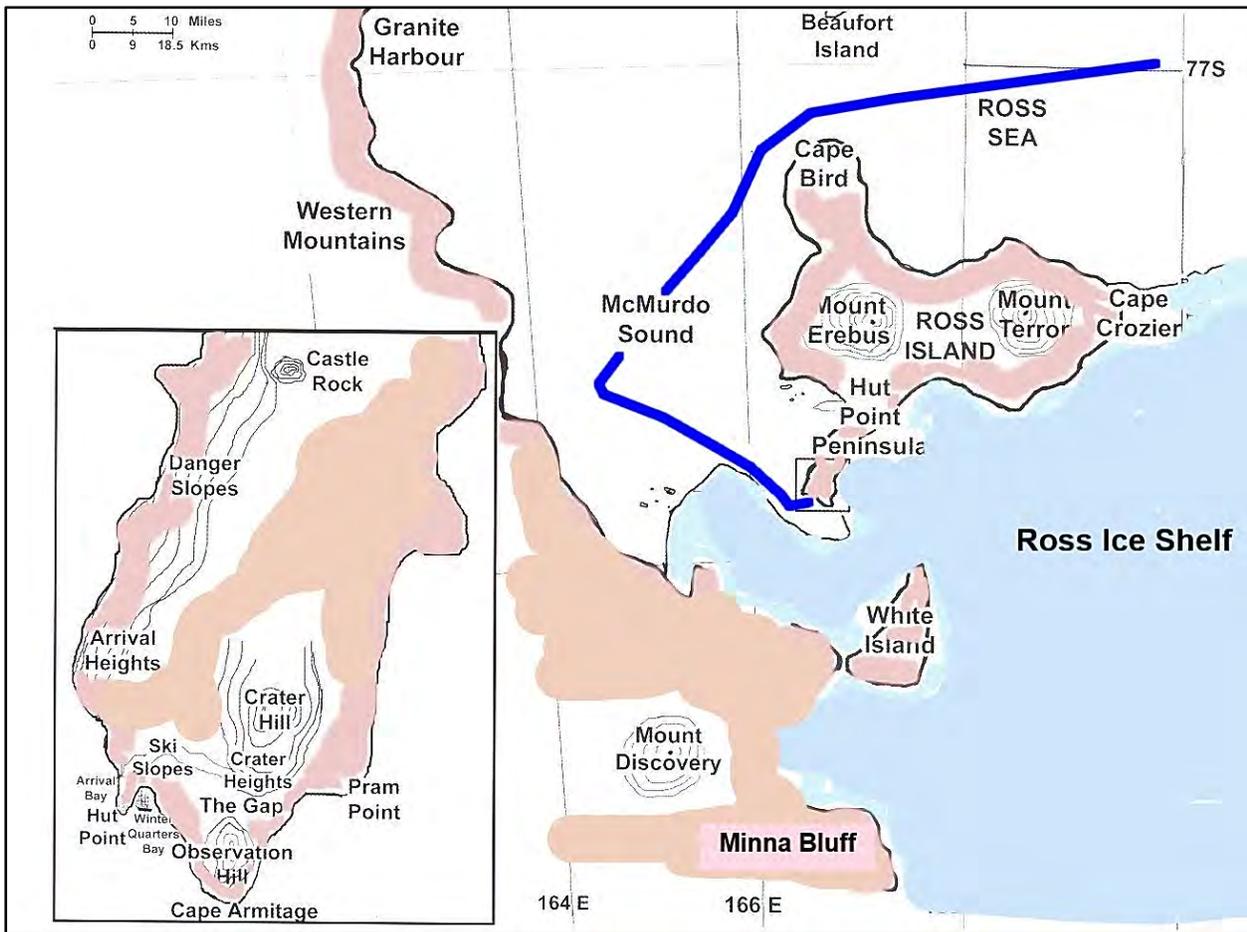
As of this date, the best known places in the Antarctic are the coasts of the Ross Sea Region, the South Shetlands, and the northern portion of the Antarctic Peninsula.



MAP 6 — The *Discovery's* Voyages - 1902 in blue, 1904 return north highlighted by yellow

When Scott reached the Ross Sea in 1902, he began with a stop at Cape Adare to leave a message for an anticipated relief ship. He then headed south along the Victoria Land coast, taking a route similar to Borchgrevink's. Scott made several landings as he went south, including one at Cape Crozier on Ross Island. From there, he continued eastward along the face of the Ross Ice Shelf. Scott, however, went substantially farther east than Borchgrevink and discovered land. He pushed eastward as far as the ice permitted, then turned back to the west, still hugging the ice shelf. When he reached the bay where Borchgrevink had landed, he also did so, naming it "Balloon Bight" in honor of the balloon ascent he made there. Like Borchgrevink, there was a sledge trip southward from here. Then it was on to find a place to spend the winter. Scott found his winter home at the far south end of McMurdo Sound. there.

Scott left his Winter Quarters Bay in February 1904 for his return voyage from the Antarctic. His only stop on the way north was at Cape Adare to repair a rudder.

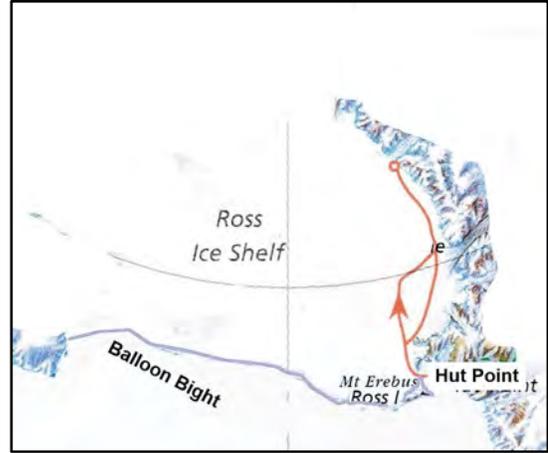
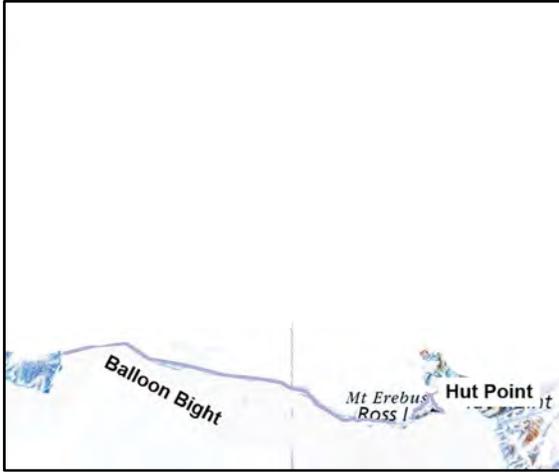


MAP 7 — Where Scott Found His Winter Home

Note: north is at the top here

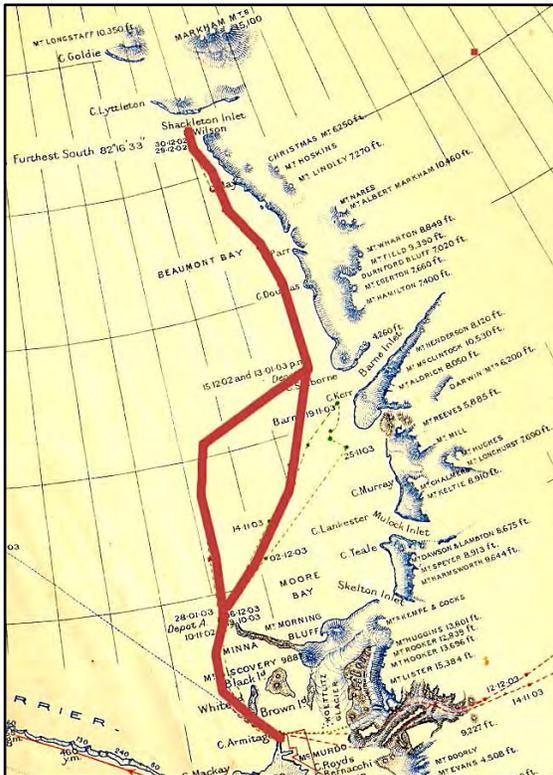
On left, detail of southern end of Hut Point Peninsula

In 1902, the ice in McMurdo Sound was open enough for Scott to reach the far south end of Ross Island, very near where McMurdo Sound meets the Ross Ice Shelf. There Scott found a sheltered bay that he named “Winter Quarters Bay.” Here, he anchored the *Discovery* and allowed her to be frozen in. He erected a large hut on shore, leading to the name “Hut Point” for a small point near the end of what he named “Hut Point Peninsula.”



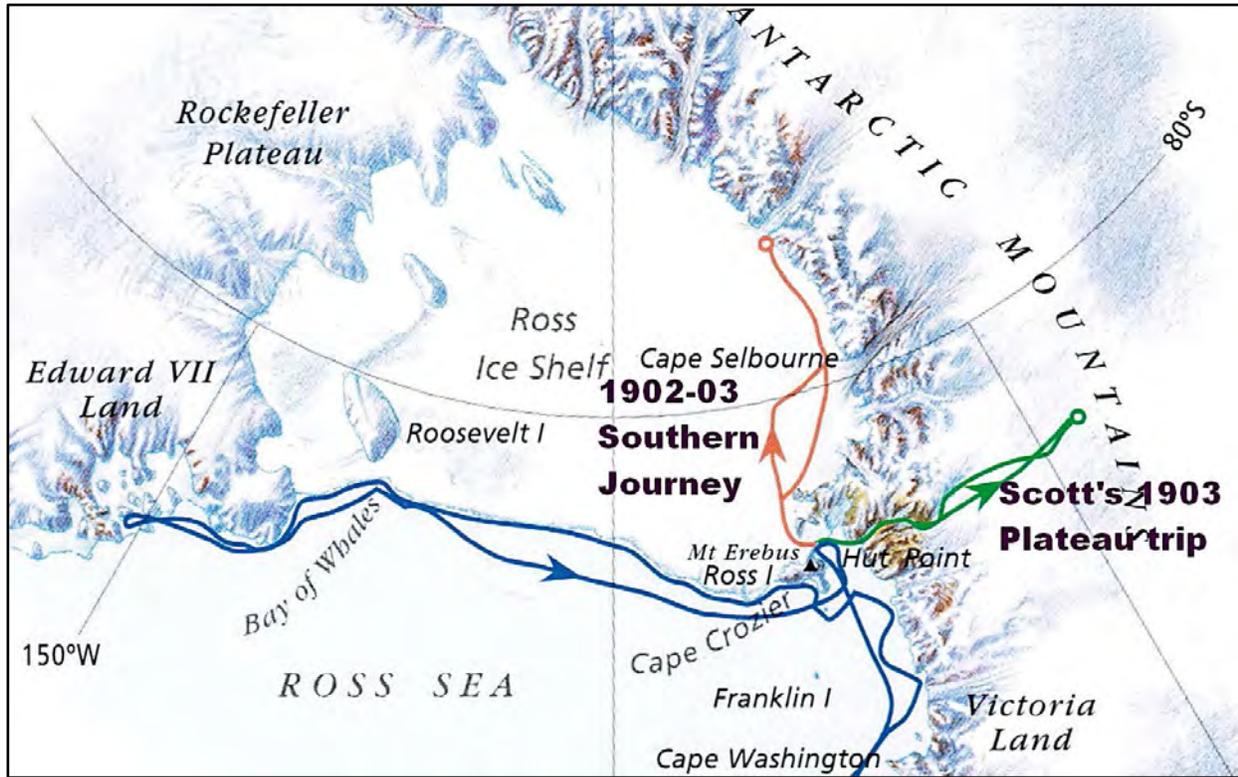
ABOVE LEFT: Before the Southern Journey — When Scott, Shackleton, and Wilson set out at the beginning of November 1902, almost nothing was known of what lay to the south. Their only information came from short depot laying trips in early spring. They knew that as far as those trips had gone, the ice shelf continued. But how far would it be before land would be reached?

ABOVE RIGHT: After the Southern Journey — The 80th parallel had been crossed, a line that had a magical quality. From 80° onward, the Southern journey three continued on the Ross Ice Shelf to just beyond 82° S. Land had been sighted to the west, a massive and towering range of mountains. But did those mountains curve around to the east as they appeared to do? Or ??



TO LEFT: Scott's map of the Southern Journey, showing what they recorded that they saw — mountains and glaciers that they saw only the fronts of, with no way of knowing what lay beyond.

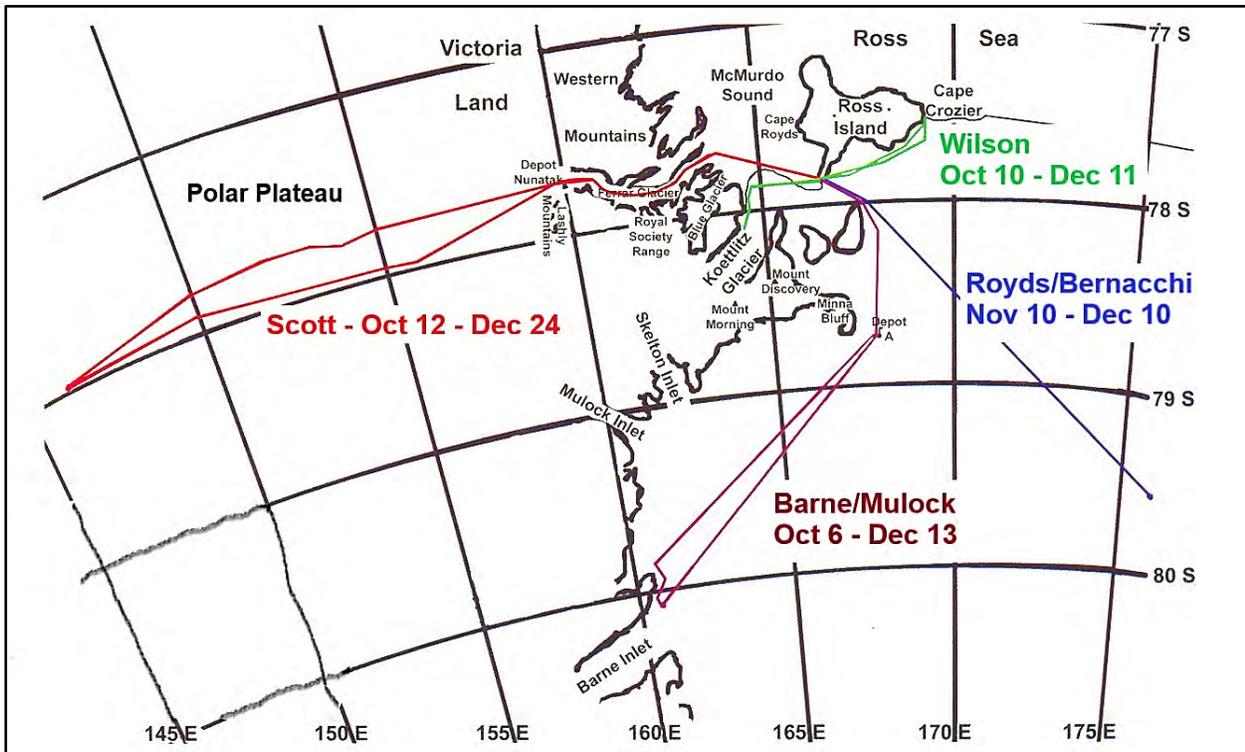
MAP 8 — The Southern Journey — What Was Known Before & Afterward



MAP 9 — Scott's Two Major Sledging Trips

Scott led two major sledging trips while on the *Discovery* expedition and both were significant experiences. The Southern Journey in 1902-03 — covered in Map 8 above — was with Shackleton and Wilson, importantly impacting his relationship with both men. The 1903 trip to the Polar Plateau was with two men from the “lower-deck,” Petty Officer Edgar Evans and Stoker William Lashly. Scott formed a bond with both and both would be with him on the *Terra Nova* expedition.

Neither trip was easy, with many lessons learned, some properly understood, others not. The legacy of both trips would have an effect on how Scott approached things when he set out in 1911 to try to reach the South Pole.



MAP 10 — The Four Major Sledging Trips of the *Discovery* Expedition
Austral spring/summer 1903

Note: North is at top

- 5) **Scott's Plateau Trip** — The longest and most significant of the trips from an exploration perspective. On this trip, Scott followed up on Albert Armitage's sledging exploration to the polar plateau during the previous summer, pushing on much farther onto the plateau.
- 6) **Wilson's 2nd trip to Cape Crozier** to study Emperor penguins — Wilson led a three-man group on a follow-up trip to his September visit to spend more time with the Emperors. A desire to do more of this would be one of Wilson's motivations for returning to Antarctica with Scott on the *Terra Nova* expedition.
- 7) **Barne and Mulock's Survey** of the west coast of the Ross Ice Shelf — Barne and Mulock led a six-man team southwest from Ross Island to about 80° S (approx.. 140 miles south of Hut Point), making a careful survey of the land on the west of the ice shelf between Hut Point and 80° S. One important result of trip, discovery that ice of the ice shelf was moving northward
- 8) **Royds and Bernacchi's Survey trip** southeastward on the Ross Ice Shelf — A six-man team under Royds explored and surveyed the Ross Ice Shelf to southeast of Ross Island, into an entirely unexplored area to a point where no land was visible in any direction. Turned back after reaching estimated 178 miles from Hut Point.



MAP 11 — The Ice Between the *Discovery* and the Relief Ships When They Arrived on January 5, 1904

Scott was anticipating that the relief ship *Morning* would be arriving in January. When he realized the ice in McMurdo Sound had not gone out, he ordered his men to get to work in mid-December sawing a channel through. It was an impossible task, abandoned on Scott's orders at the beginning of January. Three days later, relief ships arrived. *Morning* had indeed returned, but now there was another ship, the *Terra Nova*, sent by British Admiralty to support the *Morning*. The ships came with orders that if *Discovery* could not be freed, she was to be abandoned and everyone was to return home on the relief ships. With 20 miles of ice in McMurdo Sound separating *Discovery* from the open Ross Sea, it looked as if that was just what would have to happen.

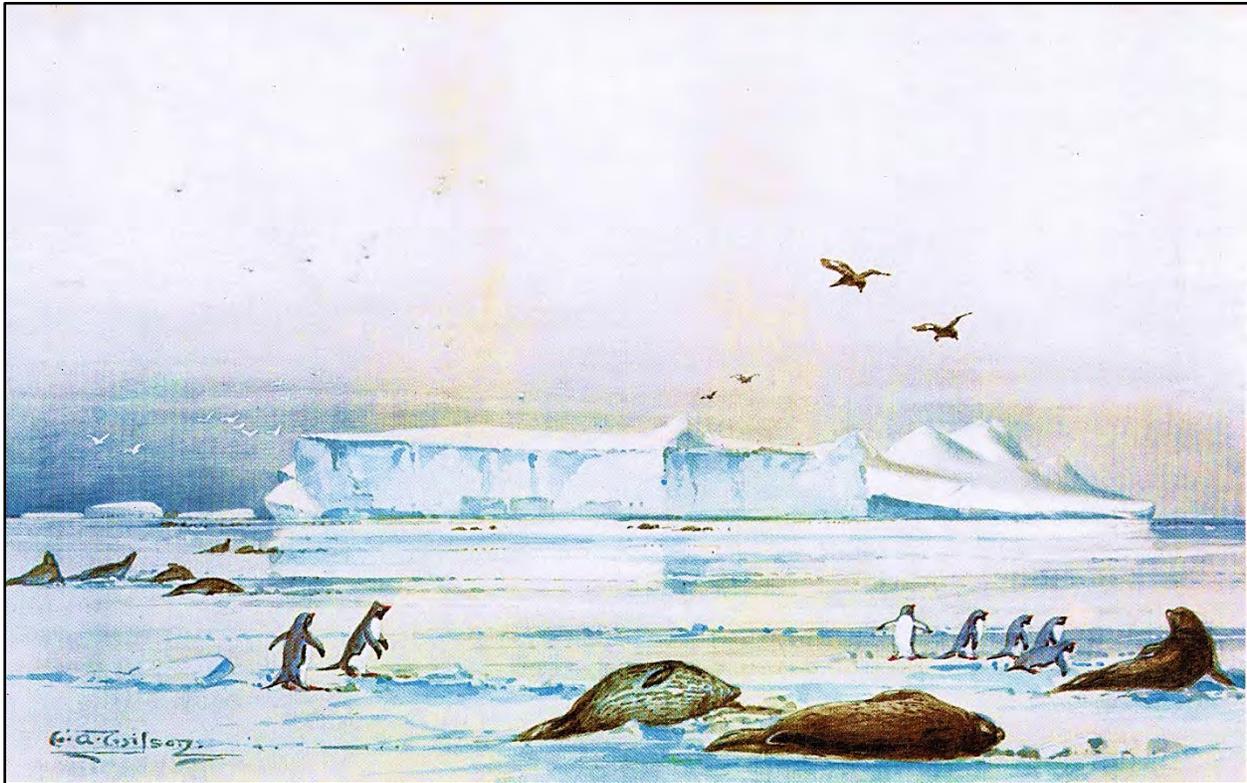
As weeks went by while expedition material was being transferred to the relief ships from *Discovery*, the men of the relief ships were doing all they could to move closer to where the *Discovery* was trapped. They used explosives to blast the ice, rammed it to break it. And nature was helping. Slowly, there was progress, allowing *Morning* and *Terra Nova* to move closer and closer to *Discovery*. Finally, on February 14, nearly a month and a half after they'd arrived at the edge of a seemingly hopeless span of ice separating them from *Discovery*, the relief ships reached her. Five days later, the three ships sailed north.

Selection of Edward Wilson's Paintings & Illustrations from the *Discovery* Expedition

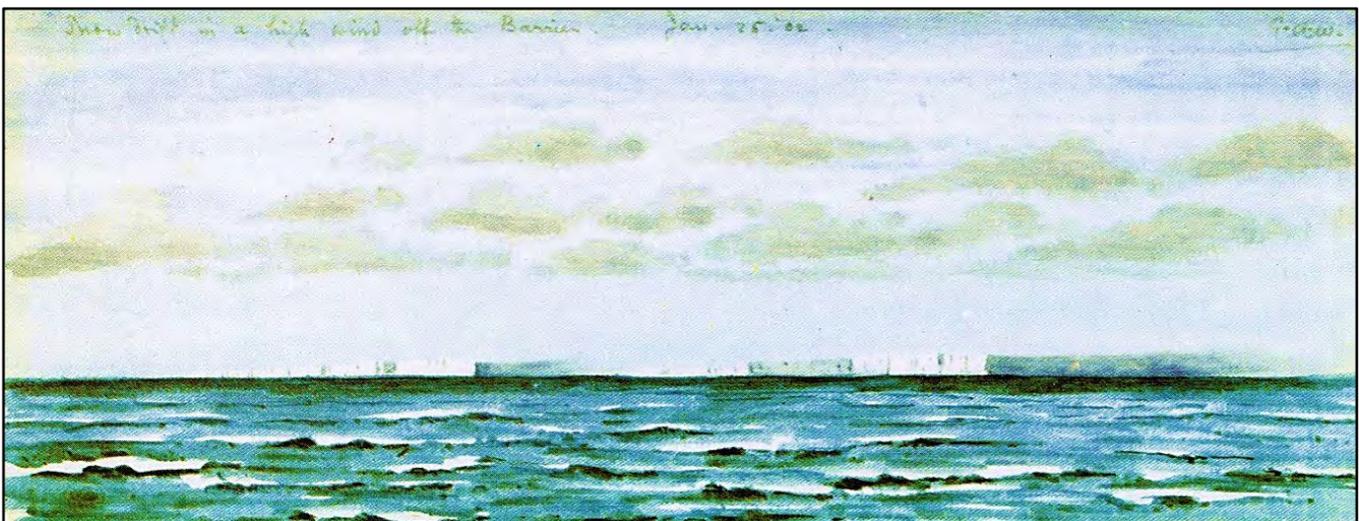


Discovery heading south through the pack ice

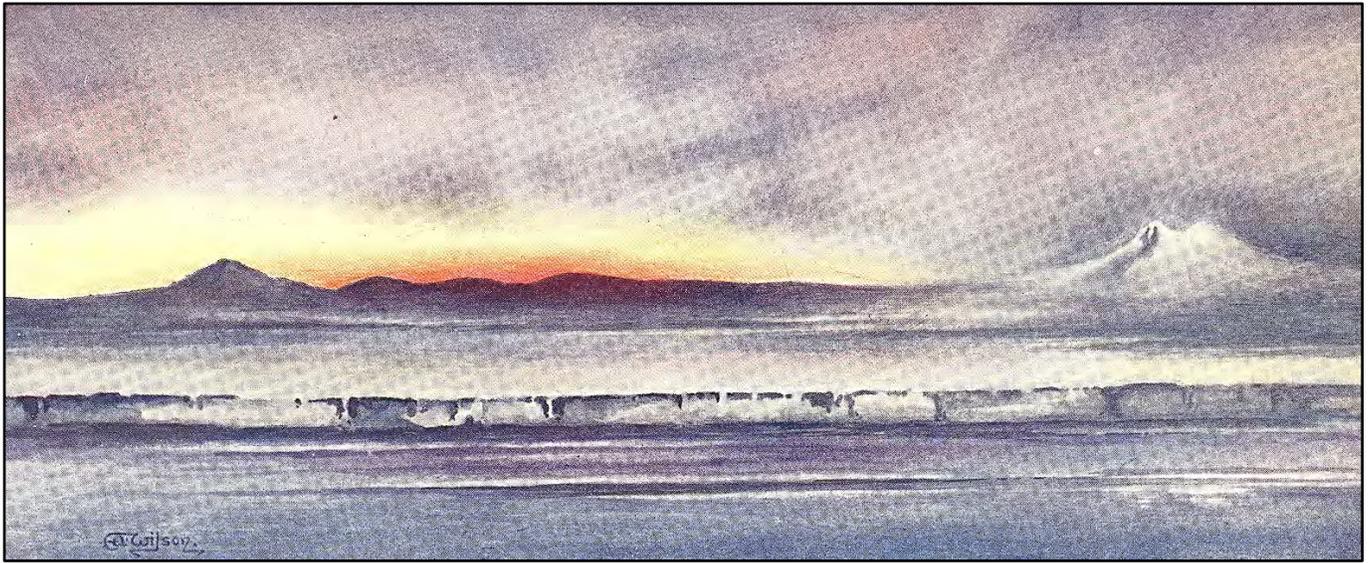
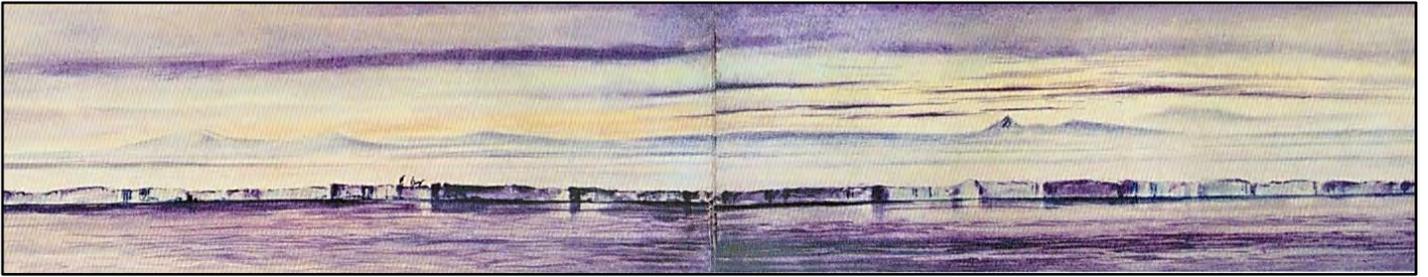
With sun dogs (parahelia) in the sky behind her



Icebergs, Seals and Penguins as seen in the Ross Sea on the voyage south



View of the Ross Ice Shelf as the *Discovery* sails eastward
Wilson's Title: "Snow Drift in a High Wind Off the Barrier. Jan. 25, '02"



Two Views of the August 30, 1902 Expedition Discovery
King Edward VII Land



Mt. Erebus from
Hut Point

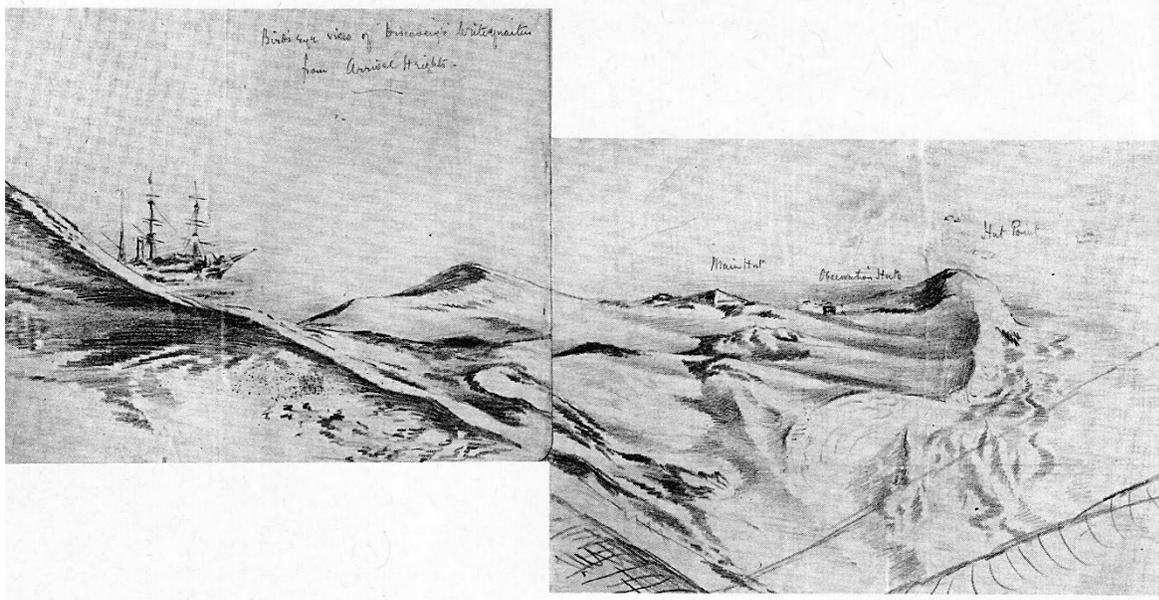
Note plume of
smoke coming
from summit on
right



Photo of Mt.
Erebus from
approximately
the same
location

January 2014

Note plume of
smoke from
summit, similar
to that in Wilson
painting



Wilson's Sketch of a "Bird's Eye View of *Discovery's* Winter Quarters from Arrival Heights"



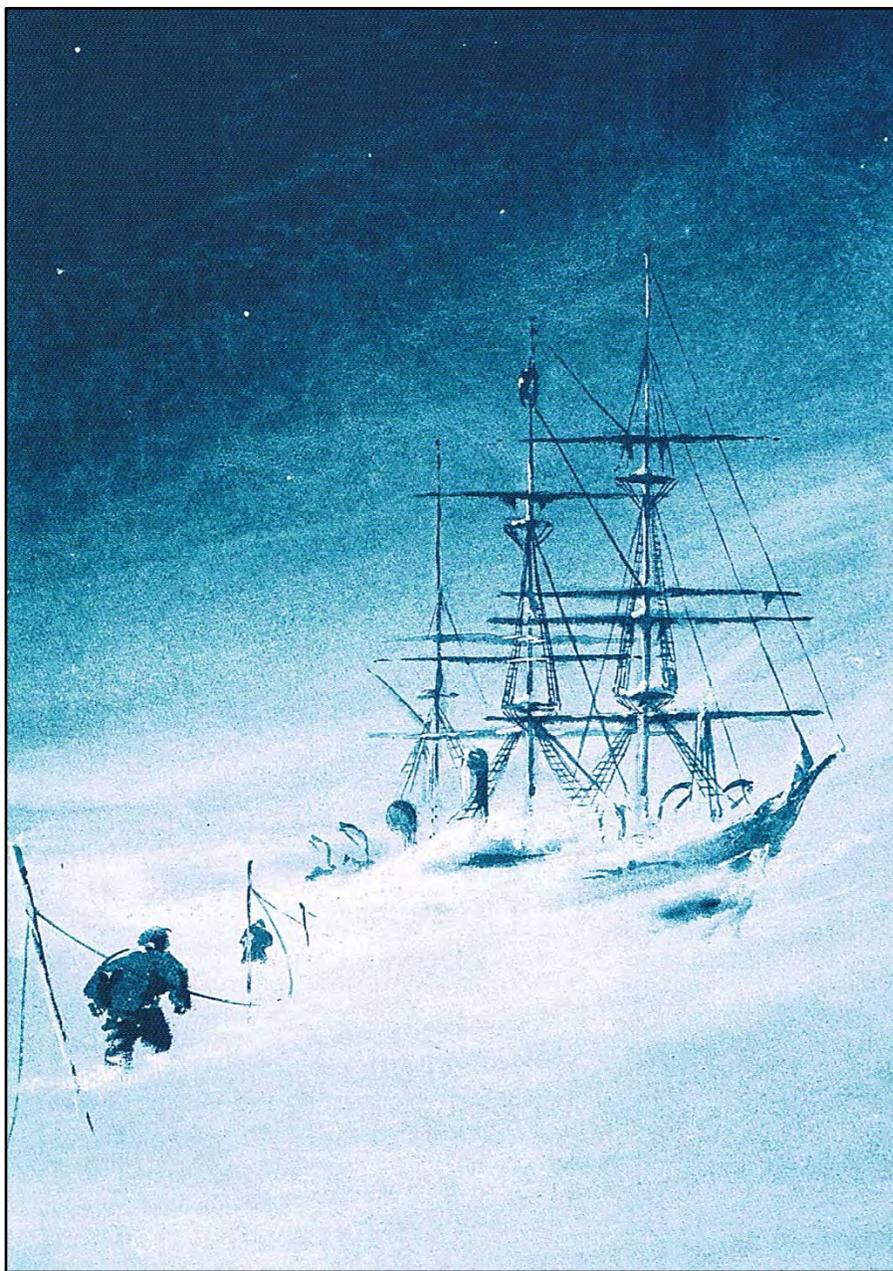
"Observation Hill from the foot of Crater Hill. Looking south west. Midday, 29 January 1902"



The "Discovery Hut," at Hut Point



Cross Erected in Memory of Lost Seaman George Vince
On hill to left of the Discovery Hut in picture above



Discovery
during the
first winter

Following a
blizzard



Some winter days are clear and calm. Here, Wilson shows us a view of the land near Hut Point in the twilight of the Antarctic night.

Wilson's title for this painting, "Looking N. or N.E. around noon, July 20, 1903. Mt. Terror and Castle Rock, Danger Slopes."



Man-hauling a sledge. Note the use of a single pole rather than the modern two poles, which had been introduced only a year or two earlier. The Swedish Antarctic expedition that explored the Peninsula region at the same time was already using two poles. Nansen, however, with whom Scott had consulted, had not recommended them.

Wilson's title for painting: "Sledge hauling on ski. A grey day on the Great Ice Barrier."



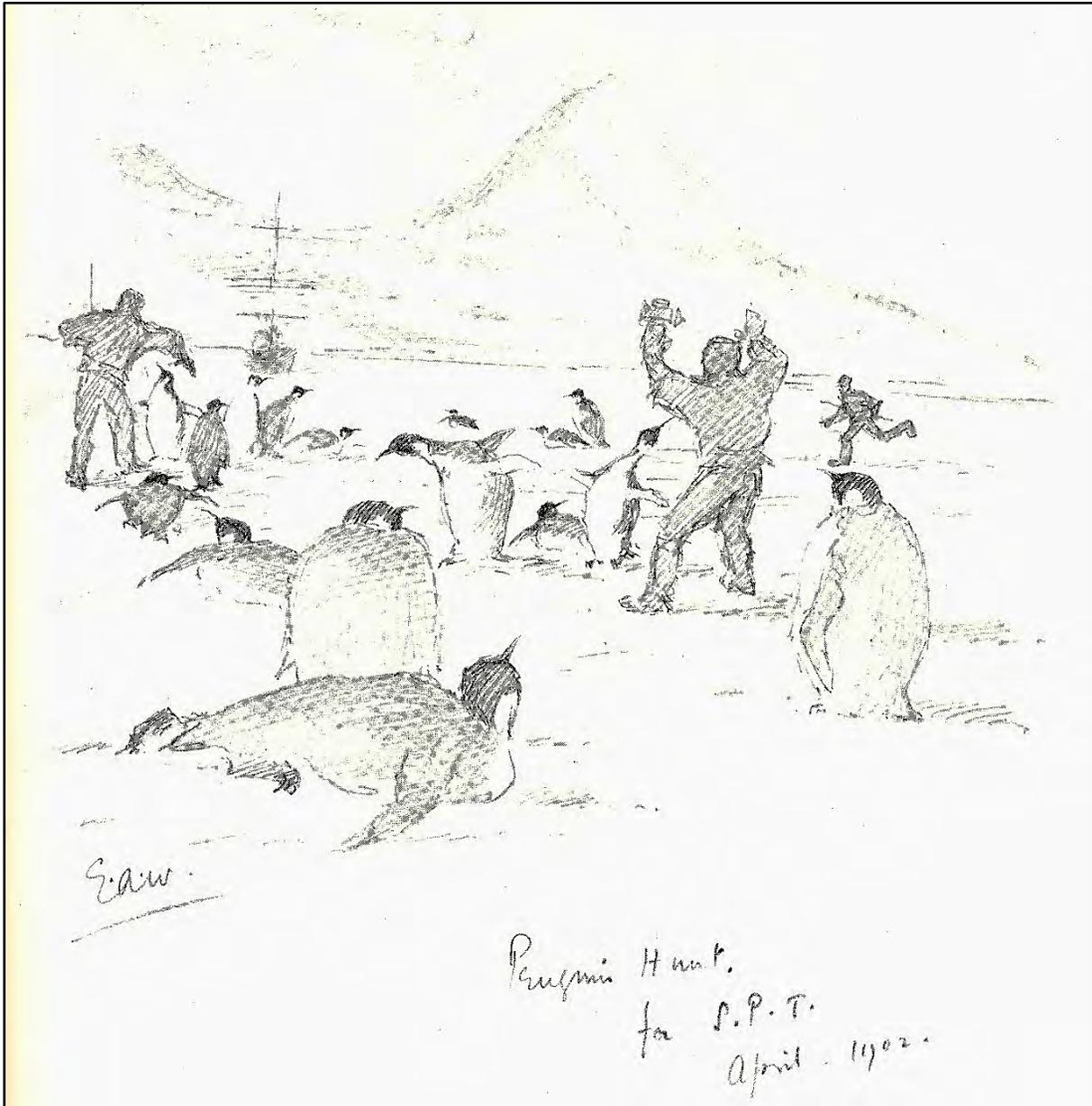
Works from the Southern Journey in 1902-03. Wilson suffered severely from snowblindness as a result of some of his artistic work on this trip. Typically, Wilson sketched what he saw in black and white while out in the field, then used the sketches to create finished works when back at the ship. For the lower, colored picture, he would have noted the colors on his sketch.

Top: Mt. Markham, Cape Wilson, Shackleton Inlet, December 1902

Bottom: Scott's Farthest South, December 1902



Emperor
penguins
with chicks
at Cape
Crozier



"Penguin Hunt"

Sketch for an illustration for the April 1902 issue of the South Polar Times

Penguins here are emperors.

Note the faint rendering of the *Discovery*, in upper left. The prominent, though also faint, hill in upper center is Observation Hill.