

FOR OUR ECONOMY:
THE COST OF
SEARCHING FOR THE
FRANKLIN
EXPEDITION IN THE
MID-1800S

Claire McCroary



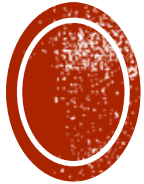
KEY NOTES

- Four cases used as examples
 - Proposed expedition by Sir John Ross
 - Expedition of 34 men, lasting 2 years
 - Expedition lead by Sir Horatio Austin
 - Expedition of 180 men, lasting 3 years
 - Expedition lead by Captain William Penny
 - Number of men and proposed length of expedition not found, financed by Lady Jane Franklin
 - Cache left by the *HMS North Star*
 - Supplies left were to feed 100 men for 1 year



William Baillie-Hamilton, Second Secretary of the Admiralty, and author of many letters about budgets





CONVERTED ACTUAL BUDGETS

Original budgets taken from primary source documents, then converted to GBP and USD using 2024 rates. Amounts converted using measuringworth.com (Measuring Worth, 2025)

EXPEDITION UNDER CAPTAIN AUSTIN.

	RESOLUTE.			ASSISTANCE.			PIONEER. (Screw Steamer, Tender to "RESOLUTE.")			INTREPID. (Screw Steamer, Tender to "ASSISTANCE.")		
	£.	s.	d.	£.	s.	d.	£.	s.	d.	£.	s.	d.
Purchase Money - - -	10,777	-	-	5,501	15	4	9,600	-	-	9,000	-	-
Additional Works and Fittings (in- cluding Masts, Yards, Riggering, Machinery and Stores) - - -	12,664	-	-	14,122	1	1	8,052	-	-	8,519	-	-
Coals - - - - -	-	-	-	-	-	-	431	-	-	234	-	-
£.	23,441	-	-	19,623	16	5	18,083	-	-	17,753	-	-

(Parliament. House of Commons, 1850)

Wages of the Crews of the above Vessels (to 31 March 1851) - - - - -	78,900	16	5
Warm Clothing for ditto - - - - -	17,896	16	8
Provisions, &c. for ditto - - - - -	3,551	11	11
Medicines, &c. for ditto - - - - -	10,935	10	2
Hire of the "Emma Eugenia," transport, (estimated for five months,) engaged to take out Coals, Stores, &c. for the use of the Expedition, and Salary of the Agent in Charge of the above transport -	549	18	7
Contingent Charges (Books for Libraries for the Crews of the Vessels, Expenses of bringing the Vessels round to Woolwich, and Travelling Expenses of Capt. Austin, &c. - - - - -)	2,108	17	3
	570	6	6
CHARGES incurred on Account of Capt. AUSTIN'S EXPEDITION - - - - £.	114,513	17	6

EXPEDITION UNDER CAPTAIN PENNY.

Purchase-money of the "Lady Franklin" - - - - -	2,700	-	-
Purchase-money of the "Sophia" - - - - -	1,700	-	-
Additional Works and Fittings, and Stores for the above Vessels - - - - -	1,918	13	4
Wages of the Crews of the above Vessels (to 31 March 1851) - - - - -	4,123	3	4
Provisions, &c. for ditto - - - - -	3,427	7	11
Clothing for ditto - - - - -	962	-	-
Medicines, &c. for ditto - - - - -	164	11	7
Contingent Charges (Books for Libraries for the Crews of the Vessels, Travelling Expenses, Freight of Stores, Towage, &c.) - - - - -	174	4	6
CHARGES incurred on account of Capt. PENNY'S EXPEDITION - - - - £.	15,170	-	8

(PRESENTED TO PARLIAMENT BY HER MAJESTY'S COMMAND.)

(Parliament. House of Commons, 1849)

AN ESTIMATE of the EXPENSE of the EQUIPMENT of Her Majesty's Ship "North Star," for the purpose of taking out a Supply of Provisions, &c. for the Crews of Her Majesty's Ships "Investigator" and "Enterprise," employed on an Expedition to the Arctic Regions.

For the Repairs and Equipment of the Hull, and Masts, Yards and Stores for Sea - - - - -	£.	s.	d.
For Wages of the Crew of Her Majesty's Ship "North Star," for Nine Months - - - - -	1,500	-	-
For Victuals for - - - ditto - - - ditto - - - - -	800	-	-
For Ordnance Stores - - - - -	302	-	-
For Provisions, Stores, Coals, &c. for the "Investigator" and "Enter- prise" - - - - -	4,000	-	-
TOTAL - - - - -	£.	12,688	-

The whole Charge amounts to the Sum of Twelve Thousand
Six Hundred and Eighty-eight Pounds.

Admiralty, }
23 March 1849. }

F. Baring,
W. Cowper.

No actual budget given
for Proposed Ross
expedition.

See next slide for modern
currency conversions

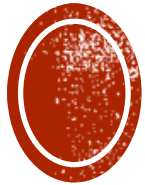


<i>Expedition Under Captain Austin</i>	2024 (GBP)	2024 (USD)
Total Ship Costs (Summarized)	£11,400,000	\$8,909,100
Wages of the Crews of the above Vessels (to 31 March 1851)	£19,000,000	\$14,848,500
Warm Clothing for Ditto	£512,000	\$400,128
Provisions, &c. for ditto	£1,580,000	\$1,234,770
Medicines, &c. for ditto	£79,300	\$61,973
Hire of the "Emma Eugenia," transport, (estimated for five months,) engaged to take out Coals, Stores, &c. for the use of the Expedition, and Salary of the Agent in Charge of the above transport	£304,000	\$237,576
Contingent Charges (Books for Libraries for the Crews of the Vessels, Expenses of bringing the Vessels round to Woolwich, and Travelling Expenses of Capt, Austin, &c.	£82,300	\$64,317
Charges incurred on Account of Capt. Austin's Expedition	£32,957,600	\$25,756,364

<i>Expedition Under Captain Penny</i>	2024 (GBP)	2024 (USD)
Purchase-money of the "Lady Franklin"	£429,000	\$335,264
Purchase-money of the "Sophia"	£270,000	\$211,005
Additional Works and fitting, and Stores for the above Vessels	£277,000	\$216,476
Wages of the Crews of the above Vessels (to 31 March 1851)	£4,390,000	\$3,430,785
Provisions, &c, for ditto	£494,000	\$386,061
Clothing for ditto	£139,000	\$108,629
Medicines, &c. for ditto	£23,700	\$18,522
Contingent Charges (Books for Libraries for the Crews of the Vessels, Travelling Expenses, Freight of Ctore, Towage, &c.)	£25,100	\$19,616
Charges incurred on account of Capt. Penny's Expedition	£6,047,800	\$4,726,356

<i>HMS North Star</i>	2024 (GBP)	2024 (USD)
For Repairs and Equipment of the Hull, and Masts, Yards and Stores for Sea	£ 938,000	\$733,047
For Wages of the Crew of Her Majesty's Ship "North Star," For Nine Months	£ 1,600,000	\$1,250,400
For Victuals for ----- ditto ----- ditto ----	£ 115,000	\$89,873
For Ordnance Stores	£ 43,600	\$34,073
For Provisions, Stores, Coals, &c. for the "Investigator" and "Enterprise"	£ 577,000	\$450,926
Total	£ 3,273,600	\$2,558,319





PROVISIONS

In order to save space, only one example from a primary source is given. Data has been taken from the Ross expedition, the Austin expedition, and the North Star supply cache.

EXAMPLE OF PROVISIONS LIST FOR THE NORTH STAR CACHE

Enclosure 7 to No. 6 (A).

LANDED at Navy Board Inlet this 27th day of August 1850, from on board Her Majesty's Ship "North Star," Mr. James J. Rutter, Clerk in Charge, the Stores undermentioned, for the Use of the Arctic Expedition; viz.

QUANTITIES.	PACKAGES.						Iron Hoops.	Cases for Lemon Juice.	Lemon-juice Bottles.	P. M. Canisters.	Packing Cases.
	Hogheads.	Barrels.	Half Hogs- heads.	Small Casks.	Irish.						
					Tierces.	Barrels.					
Biscuit - - - - - <i>Lbs. in</i>	76	-	-	-	-	-	608	-	-	-	-
Brandy - - - - - <i>Galls. in</i>	-	6	-	-	-	-	24	-	-	-	2
Rum (over-proof) - - - - - "	-	-	34	-	-	-	272	-	-	-	-
Red wine (port) - - - - - "	-	1	-	-	-	-	8	-	-	-	-
White wine - - - - - "	-	2	-	-	-	-	16	-	-	-	-
Beef - - - - - <i>8 lbs. pieces in</i>	-	-	-	-	10	14	116	-	-	-	-
Pork - - - - - <i>4</i>	-	-	-	-	12	19	148	-	-	-	-
Pemican - - - - - <i>Lbs. in</i>	-	-	22	2	-	-	140	-	-	46	-
Flour - - - - - "	-	-	110	2	-	-	892	-	-	-	-
Currants - - - - - "	-	-	-	2	-	-	8	-	-	-	-
Peas - - - - - <i>Galls. in</i>	-	-	22	-	-	-	176	-	-	-	-
Oatmeal - - - - - "	-	-	2	-	-	-	16	-	-	-	-
Sugar - - - - - <i>Lbs. in</i>	-	-	24	-	-	-	192	-	-	-	-
Chocolate - - - - - "	-	-	19	-	-	-	114	-	-	-	-
Vinegar - - - - - <i>Galls. in</i>	-	-	2	-	-	-	16	-	-	-	-
Tobacco - - - - - <i>Lbs. in</i>	-	-	13	-	-	-	104	-	-	-	-
Soap - - - - - "	-	-	-	23	-	-	92	-	-	-	-
Preserved meat* (including soup and bouilli (sorted) - - - - - }	8	-	-	-	-	-	64	-	-	2,560	-
Preserved soup, common vegetable, ox-cheek, gravy, and concentrated }	3	-	-	-	-	-	24	-	-	1,240	-
Lemon juice - - - - - <i>Cases</i>	-	-	-	-	-	-	-	31	558	-	-
Preserved vegetables† (sorted) - - - - - <i>Lbs. in</i>	2	-	-	-	-	-	16	-	-	1,536	-
Suet - - - - - "	-	-	-	8	-	-	64	-	-	-	-
TOTAL - - -	89	9	248	37	22	33	3,110	31	558	5,391	2

* Roast beef; boiled ditto; stewed ditto; beef and vegetables; seasoned beef; roast mutton; boiled ditto: soup and bouilli.

† Turnips; green peas; carrots; beet-root; parsnips: mixed vegetables.

(signed) James J. Rutter, Clerk in Charge.

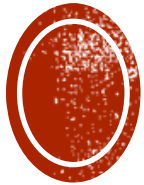
(Parliament. House of Commons, 1851)



HIGHLIGHTS

- Preserved meats for the Austin expedition and the North Star cache were provided by Goldner
 - In a report on the quality of the preserved meat provided by Goldner, 95% of the items were found suitable for consumption (Hansard HC Deb., 12 February 1852)
- Lemon juice and sugar allocated for lemon juice were always 1:1
- Flour, beef (8 pound units), sugar, and vinegar were the only items included in all three cases in the same unit of measurement
- The expedition under Captain Austin had the most detailed and varied provisions list, including items such as:
 - Live oxen
 - Hops
 - Cayenne pepper





AVERAGES

Summary of average costs of all cases across various categories

	1850			2024	2024
	l.	d.	s.	£	\$
Ship purchase price	6,546	3	1	1,040,000	812,760
Repairs and additional items	6,083	2	1	877,000	685,376
Fortifying for polar expeditions	1,064	-	-	164	128,166
Clothing	1,158	3	3	167,000	130,511
Provisions	4,144	4	3	718,000	561,117
Wages	7,840	6	4	8,340,000	6,517,710
Coal	262	-	-	37,800	29,541
Medicine	357	15	7	51,600	40,325
Additional charges unrelated to supplies	951	9	5	151,000	118,007
Boatwain's stores	473	56	-	68,600	53,611
Carpenter's stores	54	106	42	8,580	6,705
Gunner's stores	227	-	-	32,700	25,555
Engineer's stores	143	25	-	20,800	16,255
Average expected cost	29,302	229	66	11,513,244	9,125,639

Notes on averages

- Not all items were listed in every case
- Real Price conversions were used for items
- Real Cost conversions were used for ships and improvements to ships
- Average Wage conversions were used for wages



WORKS CITED

Measuring Worth - Purchasing Power of the Pound.,
www.measuringworth.com/calculators/ukcompare/.

Hansard HC Deb. (12 February 1852). Vol 119, cc438-60.
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