

Research Article

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Collaring nature: The use of foxes to find and rescue the members of the lost Franklin expedition

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Abstract

The mysterious disappearance of *HMS Erebus* and *HMS Terror* while searching for the Northwest Passage under the leadership of Sir John Franklin in the 1840s led to more than thirty different expeditions seeking to find the lost ships and their 129-man crews. It also fostered the first and only use of wild animals as a means of communication in such a rescue operation. Since covering the vast search areas was challenging, if not impossible during sub-freezing winter conditions, some of the would-be rescuers turned to Arctic foxes as couriers of information that they hoped might direct the lost explorers to safety. Based on excerpts from the participants' diaries and published reports from the period, and on the physical evidence that survives, this paper describes the role Arctic foxes were asked to play in one of the greatest (unsuccessful) rescue efforts ever undertaken in the Far North.

Introduction: Human–animal interaction

Although some visual records of human history have shown our ancestors living in harmony with nature, most early depictions and descriptions of human–animal interactions have been decidedly negative, with people hunting and killing wild animals, and/or being attacked, wounded, killed, and consumed by them. In a wilder world with a much smaller and more vulnerable human population than today, such fraught relationships are not surprising.

Given such a long and consistent history of human–animal conflict, it is worth noting that there were also some positive interactions between humans and animals. The purpose of this essay is to describe how attempts were made to employ the Arctic fox (*Vulpes lagopus*) in efforts to communicate with the 129 men who disappeared in the Arctic in the late 1840s while searching for the Northwest Passage under the command of Sir John Franklin (1786–1847).

The search for Sir John Franklin

After the failure of the Franklin Expedition to return to England several years after its last sighting in Lancaster Sound in July 1845, Franklin's wife, Lady Jane Franklin (1791–1875), and

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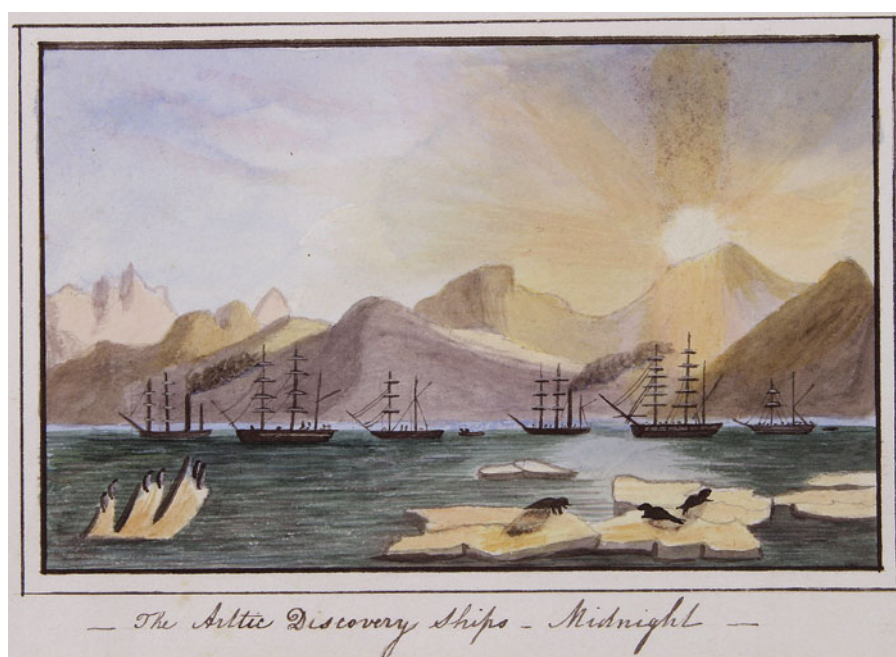


Figure 1. “The Arctic Discovery Ships – Midnight” Melville Bay, August 12, 1850, by William Parker Snow (1817–1895), Watercolor on paper, 6 x 8 inches. Private collection.



Figure 2. Relics from the lost Franklin expedition, *Illustrated London News*, November 4, 1854. Private collection.

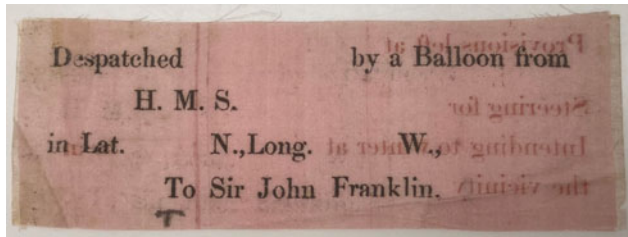


Figure 3. Sample message form for distribution by balloon in hope of communicating with Sir John Franklin's lost expedition. Private collection.

others, pressed the British Admiralty to launch a search for the missing expedition. Beginning in 1847, with a substantive finder's reward on offer, a series of expeditions joined the hunt. Some were funded by the Admiralty. Some were privately funded. At one point, in 1850, eleven British and two American ships were looking for the lost expedition at the same time [Fig. 1]. In all, more than thirty different expeditions participated in the search (Berton, 1988, 151; Ross, W.G., 2002, 57–69). As the public's interest in the subject grew, the Admiralty found itself under increasing pressure to either find the missing explorers or provide an explanation for their disappearance.

Over time, various relics from the missing expedition were found, and the sad story of the Franklin Expedition's fate began to unfold [Fig. 2]. Even if willing to concede the loss of Franklin's two ships, *HMS Erebus* and *HMS Terror*, it took decades before the world would believe that all hands had been lost with them. Throughout the 1850s, the search for the missing heroes continued. To cover such a vast area, the search teams employed a wide range of techniques to reach out to the hoped-for survivors.

Among the first and least personal ways of spreading information to the missing seamen was by releasing hot air balloons that carried messages telling anyone lucky enough to find them that there were search parties looking for them and where they could find help (Aukland & Moore, 1998, 5–6; Schoendorf, 1982, 21–27; Wordie, 1998, 75–79) [Fig. 3]. Hundreds of balloons were sent up from the rescue ships and many thousands of printed dispatches were scattered over the Arctic (Hoag, 2000). Other attempts to communicate with the lost expedition members involved the use of rockets, kites, flashing lights, gunshots, horns, and drums. At least two efforts to communicate were more tangible and lasting. These involved the use of special buttons and collars made for Arctic foxes.

Native encounters

Not surprisingly, the seamen who were looking for Franklin and his men had many encounters with native people. They hoped these experienced, well-traveled people might be able to help in the rescue effort. Unfortunately, the English-speaking searchers rarely had the language skills needed to communicate with the Inuit in any substantive way. Sometimes they gave them printed messages intended for their lost compatriots, but since these were fragile, ephemeral, and of no interest to the Inuit, the chances of them being retained, or finding their way to their hoped-for recipients were slim. For this reason, the search teams came up with another idea: something more desirable and permanent with which to convey the same information.

What they created were special buttons called “postal buttons” or “rescue buttons” on which they embossed information describing the locations of rescue vessels and caches of food [Fig. 4]. They gave these to the Inuit hunters they met in the hope



Figure 4. “Rescue Button” 1852. Private collection.



Figure 6. Arctic fox (*Vulpes lagopus*) by John James Audubon from *The Viviparous Quadrupeds of North America* (1846-1854), Courtesy of the Library, Academy of Natural Sciences of Drexel University.

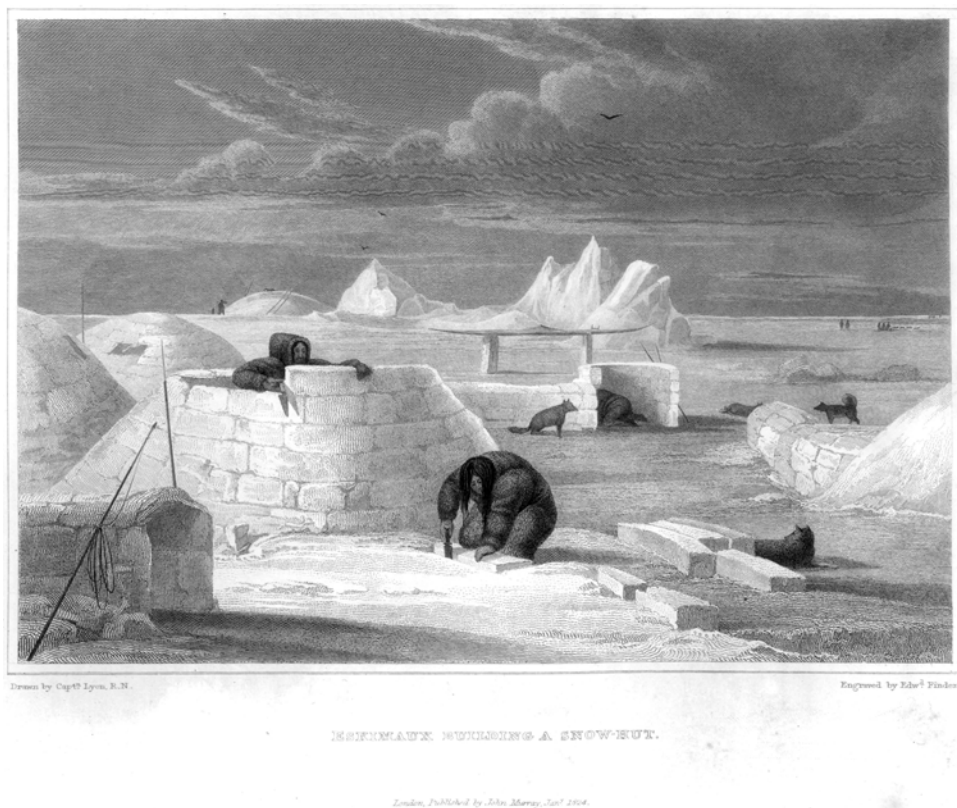


Figure 7. Arctic foxes and dogs linger near Inuit encampment, from a plate in: *Journal of A Second Voyage for the Discovery of a North-west Passage from the Atlantic to the Pacific Performed in the Years 1821-22-23 in His Majesty's Ships Fury and Hecla, under the orders of Captain William Edward Parry*. London: John Murray, 1824. 498. Courtesy of the Library, Academy of Natural Sciences of Drexel University.

to travel much farther in search of food. In 2019, an Arctic fox from Bylot Island, in Nunavut, northern Canada, was traced traveling an astounding 6400 kilometers in just 299 days (Dzombak, 2023).

Captain James Clark Ross (1800–1862), who led one of the earliest Franklin Search expeditions in 1848–1849, reported to the Admiralty his use of foxes as a means of contacting the lost mariners:

During the winter [of 1848–1849], a great many white foxes were taken alive in traps set for the purpose: and, as it is well known how large a tract of country these creatures traverse in search of food, I caused copper collars, upon which a notice of the position of the ships and depots of provisions was engraved, to be clinched round their necks, and then set them at liberty again, with the hope that some of these messengers might be the means of conveying the intelligence to the “Erebus” and “Terror” as the crews of those vessels would assuredly be eager for their capture (Ross, J.C., 1850, 61).

James D. Gilpin, a clerk on one of Ross’s ships, HMS *Investigator*, wrote a short article in the *Nautical Magazine* in 1850 in which he reported:

Traps made of empty casks, were set to catch foxes, which had become very numerous, and by hunger made very daring; or so much so, that at night they would be constantly coming on board over the stern. Several were shot from the ship, but a prohibition was issued against killing them, it being the desire to capture the little animals alive, in order that a copper collar might be fastened about the neck of each, having on it, punched in large legible characters, the ship’s name, position and date, with the occasion of our being here, in the hope that Sir John Franklin, or some of his people, might in this ingenious manner be apprised of assistance. As many as fifty were caught, and set loose in this way up to the end of December. [1848] . . . (Gilpin, 1850, 85–86).

Fortunately, we have a detailed accounting of the fox collaring in the diary of William Gibson, carpenter’s mate on HMS *Investigator*. A few of his daily entries give a good idea of what was going on:

November [1848]

16th Weather fair no wind, but very cold, the glass fell to 36dg below zero, which made it too cold for men to work outside, hands employed on board; at half past 7AM, they started [released] a fox, with a collar round his neck, with the ships names stamped on it, and the Lat[itude] and Long[itude] that we were in, this was done in the hopes that it might be the good fortune for some of Sir John Franklin’s party to fall in with it.

17th Weather fine, but very cold, the Glass 34dg below zero, the hands went outside to work though freezing so hard, it froze their water boots so hard that they could scarcely walk in them. The fox that we started [released] yesterday was caught again in the *Enterprise*’s trap, today, and they started him again, but he did not care about going away for he hung round the ship some time, the glass rose up to 15dg below zero, and kept so all night.

23rd Weather fine, hands employed on the Ice about the walk, we sent another Dispatch [information stamped on a collar] away by Mr. Fox, the glass 24dg below zero.

28th Weather moderate, hands employed outside, on the ice rising on the wall where it was so low; we caught another Fox, and started [released] him with another Dispatch [stamped collar], the glass during the day was from 22dg to 34dg below zero, very cold.

December [1848]

1st Weather fair, hands employed about the wall, we caught a fox, that had been started from the other ship, it was very tame and we started him again, the glass 39dg below zero.

5th Weather fair, hands employed on the Ice, at 4AM the glass 40dg below zero, caught another fox, put a collar round his neck and started him.

21st At 4AM glass 50dg below zero, hands out on the Ice Skylarking, we caught a fox and set him adrift with a collar round his neck, at 8PM glass 49dg below zero.

January [1849]

25th At 4AM, glass at 48dg below zero, hands employed fetching gravel, caught another fox and set the other [captured on Jan. 24] adrift with a collar round his neck with the Ships names on it and where we was [sic] laying, glass from 48dg to 47dg during.

February [1849]

8th Blowing fresh with plenty of drift, one of Quartermasters caught a fox by hand in the night, he came on board to pay a visit to our Toby, the fox that we had chained up, he had a collar round his neck, it was one that had been started from our ship about a month ago, glass 47dg below zero.

March [1849]

9th Weather fine at 8AM glass 22dg below zero hands out on the Ice all day, glass at 8PM 34dg below zero, we caught a fox with a collar on that we set adrift on the 3rd of October 1848. [not mentioned in the entry of Oct. 3rd though that entry is abridged and combined with the 4th]

April [1849]

1st Sunday weather very rough all day a strong breeze from the N.E. went to church and divisions, caught a very large fox, glass from 5dg to 13dg below zero.

2nd Weather moderated, on the Starboard side of the ship the drift snow was 7 feet thick, the hands was [sic] employed in removing it away, we put a collar round the fox’s neck with the ships name and where we was [sic] laying, and set him adrift.

By the end of April, Gibson noted that “The foxes have now all entirely disappeared.”¹ His ship had overwintered in the vicinity of what today is known as the Prince Leopold Island Migratory Bird Sanctuary. The area is well known for its abundance of nesting sea birds, and, for that reason, has become a favorite stopping place for modern Arctic cruise ships traveling through the Northwest Passage. It also explains why sailors wintering-over nearby encountered so many Arctic foxes. The animals were attracted to the ships during the winter months when wild food was hard to come by, then dispersed in the spring, when birds, eggs, and other wild food sources once again became available.

So central were the Arctic foxes to Ross’s search efforts, that they were featured in a life-sized panorama that was painted by Robert Burford (1791–1861) and exhibited in London in the years following Ross’s return to England [Fig. 8]. In this way, the fox-collaring effort was brought to the attention of the tens of thousands of people who saw it depicted in the display and read about it in the accompanying pamphlet/catalog (Burford, 1850).

While several subsequent search expeditions followed Ross’s example in creating fox collars, not all were as committed to the process or took it as seriously. Sherard Osborn (1822–1875), captain of the steam tender HMS *Pioneer*, one of four ships in a Franklin search effort overseen by Captain Horatio Austin (1800–1865) in 1850, reported on his crew’s interaction with Arctic foxes in his book, *Stray Leaves from an Arctic Journal* (1852):

¹All of the excerpts quoted here are from the original diary of William Gibson, the carpenter’s mate on HMS *Investigator*, courtesy of Douglas Wamsley.

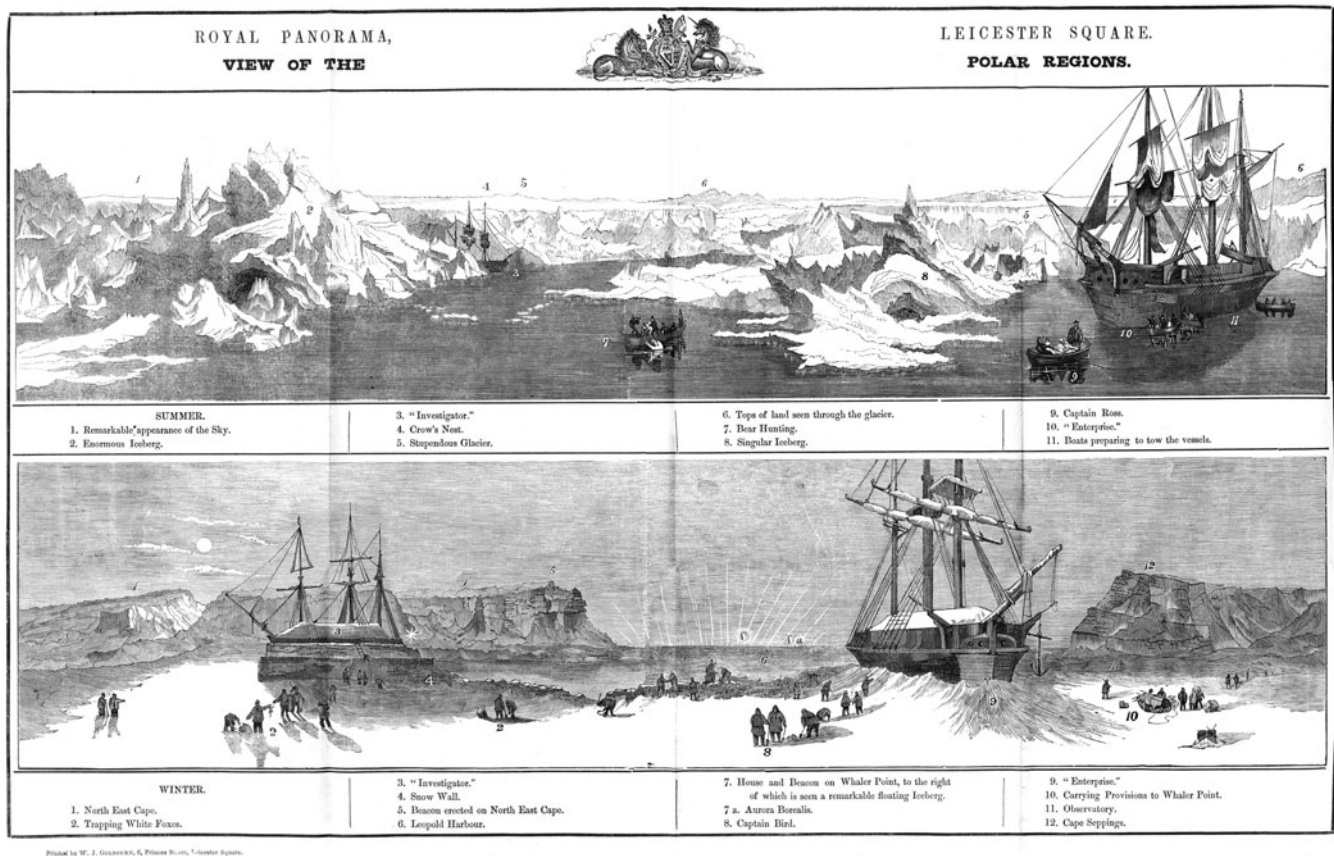


Figure 8. Royal panorama "View of the Polar Regions" by Robert Burford Broadside-brochure printed for viewers. It shows the collaring of Arctic foxes and other activities during Capt. James Clark Ross's expedition in search of the lost Franklin expedition (1848–49) Private collection.

Lastly, we carried out, more I believe from amusement than from any idea of being useful, a plan which had suggested itself to the people of Sir James Ross's expedition when wintering in Leopold Harbour in 1848–1849, that of enclosing information in a collar, secured to the necks of the Arctic foxes, caught in traps, and then liberated. Several animals thus entrusted with dispatches or records were liberated by different ships; but, as the truth must be told, I fear in many cases the next night saw the poor "postman," as Jack facetiously termed him, in another trap, out of which he would be taken, killed, the skin taken off, and packed away, to ornament, at some future day, the neck of some fair Dulcinea. As a "sub," I was admitted into this secret mystery, or otherwise, I with others might have accounted for the disappearance of the collared foxes by believing them busy on their honourable mission. In order that the crime of killing the "postmen" may be recognized in its true light, it is but fair that I should say, that the brutes, having partaken once of the good cheer on board or around the ships, seldom seemed satisfied with the mere empty honours of a copper collar, and returned to be caught over and over again. Strict laws were laid down for their safety, such as an edict that no fox taken alive in a trap was to be killed: of course no fox was after this taken alive; they were all unaccountably dead, unless it was some fortunate wight whose brush and coat were worthless: in such case he lived either to drag about a quantity of information in a copper collar for the rest of his days, or else to die a slow death, as being intended for Lord Derby's menagerie (Osborn, 1852, 176–177).

Osborn's reference to "enclosing information in a collar," as opposed to embossing information on a collar, suggests that the process undertaken by the members of Austin's expedition may have been somewhat different from that employed by Ross.

Captain Richard Collinson (1811–1883), commanding HMS *Enterprise* from 1850–1855, was another naval officer who attempted to communicate with Franklin's expedition with fox collars. In his report, Collinson states that a first fox was captured and tagged on October 25, 1851, and that three were tagged in December 1851, one of which was recaptured in March 1852. Others were tagged on May 25, 1852, and November 2, 1852 (Collinson, 1889, 170, 174, 178, 187, 247). Collinson left England in January 1850, two months after Ross's return. He may have learned of Ross's attempts prior to his departure.

Lieutenant Joseph-René Bellot (1826–1853) was another searcher who discussed his attempts to capture and tag foxes during the Franklin search, three years after Ross pioneered the technique (Bellot, 1854). Bellot served on the *Prince Albert*, the ship used for a private search expedition sponsored by Lady Jane Franklin commanded by William Kennedy (1814–1890) in 1851–1852. On its search, the *Prince Albert* stopped at Port Leopold on Somerset Island, where Ross had wintered-over, but ultimately it moved on to winter some 120 km south of Port Leopold, at Batty Bay, on the east shore of Somerset Island. Bellot was fully aware of Ross's experience in tagging foxes and referenced them in his own narrative, noting that the crew of the *Prince Albert* did the same. Unlike Ross, however, their efforts were thwarted by the ship's dogs that repeatedly attacked the fox traps and destroyed them. He reported only two foxes being captured. Both were found dead, though whether they were killed by dogs or surreptitiously

by seamen hoping to take home their pelts he does not say (Bellot, 1855, Vol. 2, 113, 258).

The copper collars created for the foxes at Port Leopold by Gilpin, Gibson, Ross and the crew of the *Enterprise* and the *Investigator* in 1848–1849 [Fig. 9], and by Osborn, Austin and the others over-wintering near Griffith Island in Barrow Strait in 1850–1851 were not as refined and elegant as some of the collars made for dogs at home [Figs. 10 and 11], but they did not need to be. Their purpose was purely utilitarian. Nor were they the only way the foxes served as messengers, or “two-penny postmen” as the sailors called them (Burford, 1850, 13). On later rescue expeditions, when marking copper collars was not possible or considered too much trouble, similar information was conveyed with vellum tags, attached to plainer, home-made fox collars of leather or metal. Only one such tag is known to survive [Fig. 12]. It was created in 1850 for use by Horatio Austin, captain of HMS *Resolute*, and

Erasmus Ommanney, captain of the teak-built barque *Assistance*. That tag reads as follows: “In Search of Sir John Franklin; H.M.S. *Resolute* H.T. Austin R.N. Assistance Capt. E. Ommanney; ? Steam Tender; Longitude ___ Lat ___; ___ Day of ___ 1850 ___.”

In 1852, William Herschel de Griesback, a retired serviceman, suggested that the survivors of the lost expedition may also have tried to use animals as a means of communication to their would-be rescuers. In a letter to the Admiralty, he reported that a number of reindeer skins that had recently been harvested in Spitsbergen had “cuts (slits) in their ears, although the reindeer of Spitsbergen live in a perfect wild state.” His explanation for such distinctive, man-made markings was that:

precisely in the same manner that the commander of a late expedition in search of the missing ships [of the Franklin Expedition] caused a considerable number of Arctic foxes to be taken alive, and after fastening printed bills or cards to various parts of their bodies and limbs, set them



Figure 9. Copper fox collar, 1848. Courtesy Scott Polar Research Institute.



Figure 10. Silver dog collars, Great Britain, 19th century. Courtesy National Sporting Library and Museum, Middleburg, Virginia.



Figure 11. Brass and copper dog collars, Great Britain 1844. Courtesy National Sporting Library and Museum, Middleburg, Virginia.



Figure 12. Vellum tag for communicating with the members of the lost Franklin expedition by Arctic fox, 1850. Private collection.

again in freedom, for the obvious purpose of creating a chain of communication with the parties sought after, provided any one single fox were caught or shot by the part in question, thus making local animals the vehicle of communication or correspondence; So might Sir John Franklin, or any member or members of his party have availed themselves of the same local facility (merely substituting the reindeer for the fox and being, of course, without the possibility of using printed cards or bills, or even written ones) of communicating with the world without, that within the dreary, and in all probability ice-bound and pent-up fastness of Spitzbergen, there existed men in possession of knives, and endowed with sufficient intelligence and means to entrap the wildest animal of the region involuntarily inhabited by them, alive, and then trusting to Providence for the result, turning them loose in hope (de Griesbach, 1852, 87–88).

“Again,” he concluded, “who shall say that Sir John Franklin, or one of his party, may not actually have caught or shot one of the foxes before alluded to, and thus have arrived at the very idea of

making the animal creation a means of notice of their existence within to the world without?”

Of course Mr. de Griesback was quite wrong about the reindeer of Spitzbergen (part of Svalbard, a Norwegian archipelago in the Arctic Ocean) living “in a perfect wild state” or that their ear markings were something that had been invented and employed by Franklin’s lost crewmembers after seeing one of the annotated fox tags. Both the Sami and the Komi cultures had been using ear-cutting as a way to mark the reindeer in their captive herds for countless generations. In any case, based on the year of their harvest in Spitzbergen, and the location from which the animals were taken, the reindeer ear cuttings that caught de Griesback’s attention were certainly not generated by the survivors of the Franklin Expedition.

Only a few of the fox collars created to communicate with the Franklin party have survived. One is at the Royal Geographical

Society, and one at the Scott Polar Research Institute [Fig. 9]. While some of the message-carrying collars were undoubtedly recovered by Inuit hunters and their copper used for other purposes, it is unlikely that any of the collars was ever found by the missing seamen from Franklin's party, for many, if not all, of the lost explorers had probably succumbed to cold and starvation before the foxes were given the potentially life-saving messages to convey.

Except for the employment of carrier pigeons, which were dispatched by Capt. Sir John Ross from his winter quarters aboard the "*Felix*" in 1850 (one of which actually reached its home, near Ayr in Scotland in five days), to my knowledge, this is the only use of wild animals as a means of communication in maritime history (Osborn, 1852, 176). The effort was unsuccessful, but the concept was a good one. Who knows what success there might have been had the effort begun just a few years before.

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