**TRAGEDIEN I SVENSKHUSET [THE TRAGEDY AT SWEDISH HOUSE]**. Kjell Kjær and Ulf Aasebø. Stamsund: Orkana akademisk. 320 p, illustrated, hard cover. ISBN 978-82-8104-204-9. NOK 332.

In her review of Lucy Jago's marvellous book *The northern lights* (2001) Arnhild Skre asked in *Aftenposten* on 12 May 2002, 'Why had the first biography of one of Norway's greatest research scientists to be written in English . . .?' After finishing Kjell Kjær and Ulf Aasebø's *The tragedy at Swedish house* I felt like asking why this gripping account is not published simultaneously in English? It is crammed with interesting material: polar, social and marine history; polar exploration, research, commerce, hunting and trapping; bravery, self-sacrifice, cowardice, malevolence and a hint of scandal. There is adventure, mystery and forensic analysis which provide a solution. It's a tremendous tale and will appeal to everyone interested in polar history. Providing, of course, they read Norwegian.

The basic story is well known. In October 1872 seventeen Norwegian hunters rowed 350 km from the north of Spitsbergen, where their six ships were trapped in ice, to Kapp Thordsen where they planned to spend winter in truly unique quarters. Svenskhuset [The Swedish house] was at that time one of only two proper buildings in Svalbard. It had been built, equipped and abandoned that same summer. Inside was everything the men needed: food (dried, salted and, crucially, tinned), fuel, furniture and bedding, equipment, arms and ammunition, clothing and books. Yet within six months they all were dead. Their corpses, and a diary describing the tragic sequence of their deaths, were found in June 1873 eight weeks after the last man died. There had been neither accident nor violence and nor did they starve. Why did they die?

The seventeen died alone but not forgotten. Far from it. In November 1872, just four weeks after they set off rowing south, the Norwegian government launched a major rescue. An offer of help was received from Denmark. Private rescue attempts were launched from Tromsø and Bremerhaven. All failed. Then, once all seventeen were confirmed dead, their reputations were denigrated in newspapers across Europe. Why was their fate of such concern to so many? It was not the first time men had been stranded on Svalbard. It was not even the first time an entire crew had died overwintering there. What was special about the tragedy at *Svenskhuset*?

Kjell Kjær, an historian living on the island of Vannøya just north of Tromsø, and Ulf Aasebø, head of the Department of Lung Medicine at the University Hospital of North Norway, address both questions and an extraordinary story unfolds. The first part of the book describes the establishment of *Svenskhuset* and why the men came to be there. The second part is devoted to the cause of their deaths.

Owing to a remarkable set of circumstances the fate of these men became entwined with two major Swedish projects in Svalbard. The first was the establishment of a colony. National interests were to be advanced through mining and tourism, not for the last time in Svalbard. The story is told crisply and in detail. It gives the impression of irrepressible vigour and enthusiasm. Within two years of geological investigation of deposits of coprolite at Kapp Thordsen international negotiations had been entered into and concluded, Royal blessing was received, a private limited company (AB Isfjorden) was founded and

financed, plans were formulated, contracts (building and supplies) were awarded, volunteers (27 men, women and children as well as horses, pigs and hens) were collected and everything was shipped to Svalbard. Within the four months of arrival, rail track had been laid, *Svenskhuset* was built and equipped, the manager began to doubt that there was sufficient coprolite, Svalbard veterans condemned the site for a variety of reasons, the manager and the director were at loggerheads, the whole scheme was abandoned, *Svenskhuset* was left with everything inside it and Swedish backers decided to sell the whole lot to the Norwegian government suggesting that it might be useful for sheltering shipwrecked sailors. What energy! What irony.

Meanwhile, Alfred Nordenskiöld's expedition to the north of Spitsbergen (incidentally, the first ever overwintering scientific expedition in Svalbard), was in trouble. Ice conditions were terrible. The expedition ship *Polhem* froze in (as intended) but the supply ships *Gladan* and *Onkel Adam* were caught in ice and the winter population of Nordenskiöld's base increased overnight from 28 (the science party) to 66. Feeding them all for eight months was clearly going to be a problem. Rightly enough *Onkel Adam* had delivered a cargo of 40 reindeer but all but one, had escaped. Moreover, six Norwegian ships with 58 crew simultaneously got trapped and froze in 40 km away.

Nordenskiöld's rations were stretched but at least he had intended to overwinter. The Norwegians had not: they had been on the point of returning home and had neither supplies nor equipment for winter. Eight men trekked over the ice to request help. Nordenskiöld had had news of the AB Isfjorden fiasco from the captain of *Onkel Adam* and he therefore knew that *Svenskhuset* was provisioned and vacant. He suggested that if some of the Norwegians rowed south to spend the winter there he would do what he could for the remainder. So it was that on 8 October seventeen men set off to row to what should have been an easy overwintering. In fact, they were rowing to their deaths

All this is told in remarkable detail, richly illustrated with large, clear photos of the ships and many of the original documents. There is also the hair-raising story of the journey to Kapp Thordsen, the farcical rescue attempt of *Albert* and the extraordinary tale of two of the six ships which broke out of the ice, one of which, *Pepita*, struggled back to Norway with her hull bound together with her anchor chain.

The second part of the book has a darker tone. It starts with an account of the overwintering at *Svenskhuset* (based on the diary which is transcribed and included in its entirety as an appendix) and of the revolting experience of the discovery of the bodies based on the witness accounts of Ole Barth Tellefsen and Fritz Mack (also reproduced in appendices). The gloom is not lifted by the ill will sparked between these two who, however, agreed on one point: the primary cause of death was scurvy precipitated by 'idleness'. And with those careless pen strokes the reputations of the unfortunates at *Svenskhuset* evaporated in the minds of many, along with the reputation of Norwegian polar operations.

The medical part of the book opens with a survey of public health in 19th century Norway, a summary of the discovery and analysis of bodies from the Franklin expedition, a short, technically detailed history of the hermetic preservation of food in tins sealed with tin/lead solder and a review of potential causes of the deaths at *Svenskhuset* (scurvy, lead poisoning

and tuberculosis). These potentially dry medial topics are well described and the text is enlivened with much historical detail. My only criticism is that the drama of the story is spoiled by giving the game away at this stage: we know that it was lead poisoning even before we get to the forensic part.

In determining the cause of the deaths at *Svenskhuset*, Kjær and Aasebø's first hurdle was to get permission to excavate and collect human and mineral material from the buried bodies and rusty tins they found there. Any enthusiast who has collided with polar bureaucracy in his or her attempt to visit a remote site or to make a research of one form or other will find themselves on familiar ground here. They succeeded in the end and went on to extract from one of the two common graves human bone containing 102  $\mu$ g lead/g ash. This value is at the lower end of the range of concentration found in the Franklin material (98–189  $\mu$ g/g). However, those values represented several years' accumulation of lead whereas the man from Svenskhuset had achieved a similar level in just a few weeks. He and his companions ate a lot of tinned food: Nordenskiöld had ordered them to record everything they used and this they dutifully did. Analysis showed that the solder on tins found half buried behind the house was 40% lead. The authors also examined bones of an 18th century English sailor who died of scurvy at Schmeerenburg and now kept at Svalbard Museum. Typical of scurvy, the surface of those bones was pitted and rough. The beautifully preserved bones from *Svenskhuset*, by contrast, had a healthy, smooth surface: scurvy, therefore, could be ruled out. Others have suggested that lead poisoning might have been a cause of the deaths at *Svenskhuset*: Kjell Kjær and Ulf Aasebø have confirmed it. Moreover, they have written a first class account both of the tragedy and of their solving its chief mystery.

Scientific details of Kjær and Aasebø's study were published in the *British Medical Journal* in 2009. This paper, and an excellent summary of the story in a 5 minute video, are available at: http://www.bmj.com/content/339/bmj.b5038. (Nicholas Tyler, University of Tromsø, 9037 Tromsø, Norway (nicholas.tyler@uit.no)).

## Reference

Jago, L. 2001. The northern lights. London: Hamish Hamilton.