POLAR HERITAGE AT RISK
The Antarctic

Why is it so important?

Antarctica was the last frontier on earth to be explored. The discovery and exploration of this largest continent on the globe is associated with remarkable stories of human endurance and sacrifice. These events have led to some of the extremely valuable scientific research that continues to this day.

In historic terms, the sites and the material associated with them are relatively young when it is considered that the first to set foot on the continent did so little more than a century ago. The activities related to these historic sites have been reasonably well documented and many first-hand accounts of these events are available, including those related to very recent events. As a consequence, many of the sites involved are also relatively well documented. This gives us a unique opportunity to capture and preserve the human history of this exceptional continent from the time of humankind’s first contact with it.

Regrettably, the popular view that the historic material located on the continent is permanently preserved by the icy climate is far from the truth. The fact remains that the remaining structures and their contents are threatened by severe winds that drive ice particles and grit, by ice heave, and by corrosion in the marine environments where many are situated.

Examples of Sites

Over 50 sites are recorded by the Antarctic Treaty System as being historic. The majority of these are in the Ross Sea region where the most co-ordinated programme of conservation is being conducted by the Antarctic Heritage Trust - a New Zealand based international organisation which has undertaken the responsibility for this task.

The range of sites includes the huts built by the early explorers as shore bases. Some remain sturdy and secure while others are in a state of collapse. The contents of some remain as a testimony to the living conditions endured by their occupants, but variation of the interior environments is steadily destroying them.

In addition to the base huts, there are a number of sites of supply depots, camp sites, monuments and graves - all irreplaceable historic resources.

Threats

Because the Antarctic continent is a truly international territory and controlled in many respects by a consensus system under the provisions of the Antarctic Treaty, there is a lack of clear responsibility for the preservation and protection of its historic resources. Although conservation work is being conducted by a number of independent groups, they rely on finance and resources that they must raise themselves. It is much too easy for government agencies of the nations associated with the sites to claim that preservation is an international responsibility and ignore the fact that without their tangible commitment these sites will be lost.

Even when work programmes can be financed and resourced, the times when work can be done are limited to short periods in the summer. Logistic difficulties make access to many of the sites problematic and working conditions on site make all tasks painstakingly challenging.

The icy climate does not permanently preserve the sites - it is slowly destroying them. Windblown ice and sand is blasting away the wood, the high ultra-violet light from the long hours of summer sunlight bleaches and breaks-down organic materials, variation in humidity within the huts accelerates corrosion, and moulds and fungi are also active.

Antarctica has a very dynamic terrain, and wave action, glacial action and ice heave all present very real threats.

Although there is much expertise in the various disciplines of conservation, few people have the knowledge and experience required to undertake the necessary work in the field. Most techniques for conservation of various materials have been developed for controlled situations such as museums and art galleries. Once treated, such items can often be held in controlled environments, but this cannot be achieved in polar situations.

Finally, many of the hut sites are being 'loved to death'. Visitation by the increasing number of tourists and other personnel who live and work 'on the ice' also endangers the sites. In spite of improved management procedures, there are recurring instances of carelessness causing damage and even occasional theft. The cumulative effects of the movement of people around the sites also takes it toll. However, it must be remembered there are many advantages from such visits because those privileged enough to see the sites frequently become some of the greatest advocates for their protection, and they provide continuing support for the various conservation programmes.

The Arctic

Similarities

The cultural heritage we find today - the result of earlier visitors to the Arctic - is in many ways very similar to that of the Antarctic. The explorers, scientists, hunters, trappers and miners brought with them their own methods and solutions for living and working, or simply surviving in the northern polar area. They left behind them small wooden buildings, stranded vessels, graves, cairns, mining equipment and other signs of foreign impact, which are today not only keys to the historical events themselves and to human adaptation - or indeed to failure to adapt - to the hostile environment, but also can be uniquely preserved remains of a 'home' culture poorly documented in the country of origin.

Combined with the existing records already found in archives, libraries, artistic representations and photographic collections, the cultural monuments and sites help to unfold the details of life and work, suffering and death, and beyond the northernmost boundaries of human habitation. At the same time, they are a magnet to modern visitors to the 'pristine' Arctic wilderness, who seem to see no paradox between the concept of 'untouched nature' and the thrill of finding historical sites scattered across the wilderness.

The Political Situation

The political situation in the Arctic is different from Antarctica as there is no part of the Arctic land area that does not belong to a national State: USA, Canada, Greenland/Denmark, Norway and Russia, all with their own legislations and understandings of the
Ernest Shackleton's hut at Cape Royds, Antarctica (1907-09), one of the historical monuments from the "Heroic Age" of Antarctic exploration.

A Norwegian trapper's hut in Northeast Greenland, erected in 1938. This was the standard size and type for such huts used as subsidiary living accommodation out in the hunting territory in connection with a slightly larger main cabin.
heritage question. National boundaries are, however, relatively new in the High Arctic. Consequently, historical monuments and sites, even as recent as the 20th century, can today lie in the Arctic territory of a nation other than their country of origin. Thus the cultural heritage of many nationalities is included in the common Arctic heritage, as is the case in the Antarctic.

Threats

The myth of the freeze-drying preservation of sites in extremely cold climates is also applied to the Arctic – although there is some measure of truth in it. Organic matter, including human corpses several centuries old, can be found amazingly well-preserved, as can buildings and building foundations when the conditions have been optimal. However, the harsh natural conditions contain a number of threats that it is not always possible to counteract. Many sites were placed near the coast for ease of access and are now threatened by coastal erosion. As in Antarctica, wind and ice break down buildings and wooden materials, while ice-heave destroys graves and depots and causes posts and markers to fall. The annual freeze/thaw of the surface layer causes wooden foundations to rot, while snow blown into buildings in the winter melts in the summer, again causing rot, fungus and then ice pressure during the next winter. Unlike the Antarctic, the Arctic heritage also has to withstand the ‘bulldozer’ effects of curious polar bears, which go through plank walls like they were paper, leaving the buildings even more exposed to the weather.

Other threats have more human origins and possible solutions. National authorities are not always aware of the value of heritage from other nations’ early visits to their territory – such an awareness needs to be awakened and stimulated. Fieldwork is logistically expensive and the season is short, as in the Antarctic. In order to make the work more efficient, scientists working on specific problems of conservation in the Arctic need to be encouraged and assisted to contact those working with similar problems in other parts of the Arctic as well as the Antarctic. And as with the Antarctic, the tourist challenge needs to be met, controlled and stimulated to move in the right direction, for the best interests of the polar heritage. When one person visits a site, there may be no impact at all, but when repeated groups of people walk to and around a site, even with apparent respect and care, this can in the course of even one season leave irreparable marks in the fragile vegetation. In addition to detracting from the aesthetic value of the site, the damage to the vegetation may also lead to further damage to the thin surface soil layer and, in the worst case, cause a few footprints to develop into a deep meltwater channel. Not least of the issues is the need for an education programme and dissemination of information about the unusually modest appearance of many of the cultural heritage objects and sites in the Arctic, which leads to damage and destruction simply from lack of knowledge or understanding of their historic value.

The ICOMOS Polar Heritage Committee (IPHC) has recently been formed to attend to these challenges and threats facing the visitor heritage of both polar areas. Inevitably, many historical remains and sites will gradually disappear from natural causes, but we believe that any assistance we may be able to give to scientists, conservation agencies, government bodies and others dealing in some way with the cultural heritage of the Arctic and Antarctic, will be a positive contribution towards facing the various threats.

Susan Barr and Paul Chaplin
ICOMOS Polar Heritage Committee