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ST KILDA CLIMATE CHANGE CHALLENGES QUANTIFIED FOR FIRST TIME

A report published today has identified the three biggest threats from climate change to the UK's only dual World Heritage Site, St Kilda. Warming land and sea temperatures, more frequent and severe storms and changes to ocean currents around St Kilda will make it even harder to conserve its unique built and natural heritage, the National Trust for Scotland has said.

The Climate Vulnerability Index (CVI) assesses the historic and predicted changes to climate in World Heritage Sites and the potential impact on these important places of historic and natural significance. This is the first time the method has been applied to a place designated for both its natural and cultural significance.

The process identified five key features of St Kilda which together describe its international importance (known in World Heritage as 'Outstanding Universal Value'):

1. Scenery and landscape
2. Seabirds
3. Genetic interest and biodiversity
4. Marine environment
5. Relict cultural landscape

A haven for seabirds and home to its own unique sub-species of mouse and wren, St Kilda is exposed to the elements in a way that is distinct from all other UK World Heritage Sites.

National Trust for Scotland Property Manager for St Kilda Susan Bain said: "Taking care of St Kilda is a huge task for the National Trust for Scotland. We have certainly been experiencing the effects of climate change on St Kilda for decades, with the impacts on some of the seabird species and marine habitats being particularly profound. This report tells us that in the future we will have more and more challenges to manage, and it will be increasingly difficult to do so.

"Warming sea temperatures are already impacting on the food chain for the hundreds of thousands of seabirds who breed here each summer, and some species are at risk of disappearing from St Kilda forever. Changing currents could compound this even further, fundamentally changing the habitats and with that the types of birds that can thrive here.

"The risk of increasingly ferocious and frequent storms not only puts the unique built heritage of St Kilda at risk of more damage but also makes it practically more difficult to get our dedicated staff and volunteers out there to carry out our vital conservation

work. It will potentially make St Kilda even more challenging for tourists to visit than at present.

“St Kilda is a special place, and the National Trust for Scotland is privileged to care for its nature, beauty and heritage for everyone. The scale of this task is only going to grow, and our charity will need more and more support to carry out our work in the future.”

In 2023, the National Trust for Scotland counted populations of four species of cliff-nesting seabird on St Kilda, including fulmars with which the island and islanders of the past are so linked. Compared with the previous count in 1999, cliff-nesting seabird numbers had declined by more than half (61%), and fulmars in particular had declined by 70%.

St Kilda represents the fourth CVI application conducted in Scotland’s World Heritage through a partnership between Historic Environment Scotland and James Cook University (Australia). Systematic assessments of climate vulnerability have also been undertaken for neolithic heritage in Orkney, the historic city of Edinburgh, and the Antonine Wall (the northernmost extent of the Roman Empire). The CVI assessments for the Old and New Towns of Edinburgh, the Antonine Wall and St Kilda were supported by a Royal Society of Edinburgh Research Network Grant. A variation of the CVI was also applied for the Flow Country, currently being considered for World Heritage status.

Dr Mairi Davies, Climate Change Policy Manager at Historic Environment Scotland, said: “As part of our initiative to conduct CVI assessments for Scotland’s World Heritage properties, we worked with the National Trust for Scotland and James Cook University to investigate the impact of climate change on St Kilda. The results align with what we are seeing across Scottish heritage properties, which is that climate change and extreme weather are speeding up the deterioration of natural and cultural heritage.

“We believe that the historic environment sector, with organisations such as the National Trust for Scotland and tools such as the CVI, has a crucial role to play in the development of a climate ready Scotland. It is becoming increasingly clear that action must be taken on every level, and research projects such as the one conducted on St Kilda give us a clearer picture of what is needed to address loss and damage and adapt to the changing climate.”

CVI co-developer, Professor Scott Heron said: “The CVI assessments of Scottish World Heritage, undertaken to-date, have indicated moderate to the highest levels of vulnerability to climate threats including from changes in precipitation and temperature. These represent substantial risks from future climate change to the heritage values in each site.

“The analyses also indicate that there are likely to also be impacts on communities from the climate change-driven decline in World Heritage values.

“Adaptation strategies discussed during the CVI process are being planned and implemented in each location. These range from improving understanding of specific risks, such as through enhanced flood mapping in Edinburgh, to undertaking actions that mitigate impacts, which includes management of tourist foot traffic at Orkney, especially during periods of heavy rainfall.”

Professor Heron, who holds the UNESCO Chair on Climate Change Vulnerability of Natural and Cultural Heritage, continued: “To date, the CVI has been applied at World Heritage properties in 15 countries across marine and terrestrial locations, including urban and rural settings, ranging from a small historic wharf district in Norway to vast areas of marine habitat in Australia and inland forest in DR Congo. In each case, the CVI outcomes are informing management actions that can be implemented now to reduce impacts from future climate change.

“Preparations continue for additional CVI applications, including analyses for Scotland’s two other World Heritage Sites, New Lanark and the Forth Bridge. The partnership with HES has been of great benefit in developing and expanding the utility of the CVI.”

The full report is available at: www.historicenvironment.scot/st-kilda-cvi

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Notes for editors

IMAGES - https://www.flickr.com/gp/133918740@N04/8pH5bdknN7

Climate change is the fastest growing global threat to World Heritage. Historic Environment Scotland is therefore taking significant climate action now to protect our past for the future. As the climate crisis intensifies, there is an urgent need to understand the vulnerability of all types of heritage, including climate change impacts upon Scotland’s six World Heritage properties.

The Climate Vulnerability Index (CVI) is a rapid and systematic tool developed specifically to assess climate change vulnerability for all types of World Heritage (cultural, natural and mixed). The first global CVI assessment for a cultural World Heritage property took place at the Heart of Neolithic Orkney in April 2019.

A grant from the Royal Society of Edinburgh has enabled subsequent CVI assessments for the Old & New Towns of Edinburgh, the Antonine Wall, and St Kilda (plus a snapshot CVI for the forthcoming World Heritage nomination of the Flow Country).

The CVI has now been applied to four of Scotland’s World Heritage properties, assessing a diverse array of heritage from the Neolithic to the 20th century. The reports, and a project overview, are available on the HES website at https://www.historicenvironment.scot/archives-and-research/publications/?searchPubText=cvi .

The CVI has been adopted as a standard tool for considering climate impacts on Scotland's World Heritage. In doing so, Scotland has set a benchmark for World Heritage properties in other countries. Our historic environment is on the front line of climate change, and Scotland is a global leader in heritage-related responses.

About the National Trust for Scotland

Established in 1931, the National Trust for Scotland is Scotland's largest conservation charity and cares for, shares and speaks up for Scotland's magnificent heritage.

Over the last 90 years the Trust has pioneered public access to and shared ownership of some of the most magnificent buildings, collections and landscapes in Scotland. It cares for more than 100 sites, from ancient houses to battlefields, castles, mills, gardens, coastlines, islands, mountain ranges and the plants and animals which depend upon them.

In March 2022 the National Trust for Scotland launched *Nature, Beauty & Heritage for Everyone*, its ten-year strategy which sets out the ambitions of the charity over the coming decade. From speaking up for Scotland's heritage which doesn't have a voice, to improving the lives and wellbeing of people across the country, and responding to the climate and biodiversity crisis, the Trust will build on its work in recent years to grow its impact and conserve and restore more of Scotland's heritage, as it moves towards its centenary in 2031.

Scotland's largest membership organisation, the National Trust for Scotland relies on the support of its members and donors to carry out its important work.

For more information on the National Trust for Scotland visit www.nts.org.uk.