

Culture and Climate Change: The Value of Local Collections in Addressing Climate Change

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Using case studies from Australia, the author highlights how collecting institutions and local historical societies have an important role to play in responding to the challenges of climate change, from discharging their responsibilities of care for collections and providing critical data on how communities have historically responded to natural disasters, to supporting effective community rebuilding after crises and sustaining a sense of culture and identity.

Between November 2019 and February 2020, more than 478 people lost their lives in the catastrophic wildfires that swept across south-eastern Australia. Over 3 billion native animals were killed, and more than 3,000 homes were destroyed (Bradstock et al. 2021). Also lost were the thousands of objects and records held in family collections, local historical societies, schools, sports clubs, and other community organisations that help define a place and its people. With a long history of bushfires in Australia, previous fires had been blamed on firebugs or poorly maintained power lines. In 2020, the role of climate change became the key focus.

The Indo-Pacific region, to which both Australia and Singapore belong, is highly vulnerable to climate change. As wildfires ravaged south-eastern Australia in January 2020, flash floods in Indonesia killed 66 people and displaced over 60,000. At the same time, COVID-19 began to rip through communities. The United Nations Economic and Social Commission for Asia and the Pacific (ESCAP) found in 2020 that “climate-related disasters affected over 75 million people and caused almost 6000 deaths in the region” (Srivastava et al. 2021). ESCAP concluded that while COVID-19 caused more deaths, three times more people were affected by climate change (Srivastava et al. 2021). The United Nations

Office for Disaster Risk Reduction (UNDRR) published research that demonstrated a steep increase in climate-related disasters with 3,656 in the period 1980-1990, rising to 6,681 in the period 2000-2019 (UNDR and CRED 2020). In early 2021, the *Sixth Assessment Report of the International Panel on Climate Change* reported a worsening situation.

As public organisations that hold a nation’s history, reflect a nation’s identity, and contribute to a nation’s creative innovation, major collecting institutions and small local historical societies have a particular role to play in responding to the challenges of climate change. In Australia, the major state and national collecting institutions are situated in major population centres in urban environments along the coastline. With responsibility for the care of their collections, and as leading public institutions, they have the capacity to respond effectively.

In Australia’s largest city, Sydney, the Art Gallery of New South Wales includes solar panels for electricity production, rainwater harvesting, and a seawater heat exchange system for air-conditioning in its new building design, making it the first Australian public art museum to achieve 6 Star rating under the Green Star certification scheme—a sustainability ratings system for buildings established by Green Building Council of Australia (Green Building Council of Australia 2018). The Australian Museum achieved carbon neutrality with its Sustainability Action Plan, modifying the museum’s air conditioning units to help reduce energy consumption by 25%, replacing fluorescent lighting with LED lights, and eliminating single-use plastics (Australian Museum 2021). In line with its role in education and raising public awareness, the Australian Museum also hosts a website *Capturing Climate Change* where a range of individuals including

artists, public figures, and community members showcase their thoughts and experiences of climate change.

These actions, of mitigating their environmental impact and of creating public awareness, are reflected in public institutions across the globe. Yet for the small collecting organisations, of the kind most affected during the bushfires, their relationship to climate change is much more immediate and critical. Across Australia, there are millions of local historical collections, archives, and objects held in small communities and families. In rural, regional, and remote Australia, there are around 2,000 small museums, 1,000 historical societies, 160 local and regional art centres, 150 Indigenous art centres, 400 historic properties, and thousands of local archives of long-standing local businesses, community organisations, schools and universities, sports clubs, and the like (Deakin University 2002; Mansfield et al. 2014). They are situated in areas where environmental impacts are particularly severe: on the coastline or in the desert, and many do not have the resources to utilise substantial technological innovations. These collections remain extremely vulnerable to the impacts of climate change.

Remoteness does not equate to insignificance, and many of these places hold cultural material that is highly significant both nationally and internationally. This is the case with Australia's Indigenous art centres, located in some of the most remote parts of Australia, in places that may involve a day's drive along dirt tracks to the nearest town, and which may be cut off from road and air travel due to weather conditions during some periods of the year. Djambawa Marawali AM, Chairperson of the peak body, Arnhem, Northern and Kimberley Artists Aboriginal Corporation, describes these art centres as the

backbone of many Indigenous communities, protecting, preserving, and making accessible cultural material from the past. He argues that Indigenous art centres help to keep Indigenous knowledge and "culture alive in our blood and our soul", and that they are important in providing income for artists and employment for locals.

Safe keeping makes Aboriginal people feel really strong and proud and alive. Caring for collections is a really significant role. It is important to give real jobs to Aboriginal people caring for and looking after objects in their community museums. That way they can also learn to share the knowledge and the patterns and the stories for future generations (Scott 2017).

Crucial though they are to local communities, their location makes disaster response difficult. Warmun, a small Indigenous community of around 400 people in northwest Western Australia, was inundated by floodwater in 2011, after the Turkey Creek broke its banks. Submerged under turgid floodwater, artworks and objects in the Warmun Art Centre had to be airlifted out of Warmun, stabilised for three weeks before being packed and driven in a refrigerated truck 3,763 kilometres to Melbourne for treatment, where there was the capacity for the long-term conservation project that was required (Carrington et al. 2014).

On the other side of the country in Far North Queensland, the Bana Yirriji Art and Cultural Centre belonging to the Wujal Wujal community had to be rebuilt after being flooded in January 2019. Two months later and 650 km north of Wujal Wujal, Cyclone Trevor battered the Lockhart River community. Winds of more than 130 kph caused damage to the Lockhart River Art Centre and terrorised the community (Indigenous Art Centre

Alliance IACA 2019). Lockhart River is around 2,500 km (or a 30-hour drive) from Brisbane, so during the cyclone season it is difficult for supplies to be brought in and for conservators to respond to such disasters.

Other impacts occur as changing climate affects smaller community collections across Australia. For example, with changes in temperature and rainfall, the range of insect pests, such as termites, that can attack cultural material increases. This occurred at Wadeye, an Indigenous community near the northwest coast of the Northern Territory, where termites crawled up inside the wall and ate away the back of a significant Church panel painting that had been painted by senior men in the early 1960s. They left a thin layer of support and a damaged paint surface that required complex conservation treatment that has been ongoing since 2012 (Waters-Lynch et al. 2015).

Rising temperature and increased humidity require additional use of expensive air-conditioning. At the Warlayirti Art Centre at Balgo, the highest average temperatures above 40 degrees Celsius occur over eight months from September through to April. Over the year, the average rainfall fluctuates from 84.2 millimetres in February to 2.9 millimetres in September (Australian Government n.d.). With costs of air-conditioning in a small storage area at around A\$60,000 per annum, increased costs incurred by air-conditioning may reduce the financial ability of the art centre to create jobs for people.

Local collections also hold information about climate change. For example, in 2019, the Darling River at Wilcannia dried up during record droughts. This was a national disaster and created substantial public and political furore. A photograph from 1902, held in the Port of Echuca collection, shows the level of the Darling River at Wilcannia at the beginning of the 20th century (Victorian Collections). This kind of visual information adds to the statistical data around climate change, and helps scientists better understand the shifts and impacts in climate change. In Indigenous art centres, senior knowledge holders paint their stories of climate and record the impacts of climate change in ways that provide rich qualitative data for researchers (Barney et al. 2013).

Providing access for its citizens to their cultural, historic, and scientific heritage is a critical part of any civil society. Ensuring a sense of continuity of culture and identity is an important role for all collecting institutions, regardless of size and location. The significance of this role is particularly felt in communities that have suffered catastrophic loss from the impacts of climate change. Our cultural, historic, and scientific records are important tools in our understanding of climate change, but many are at risk due to climate change. Finding mechanisms to ensure that all collections are safeguarded into the future supports effective community rebuilding after a crisis. It also means that important data is secured for researchers to map climate change and its effects, and that critical material that will help in understanding how communities have responded to natural disasters in the past, is available to assist now and in the future. □

About the Author



Robyn Sloggett is Cripps Foundation Chair and Director of the Grimwade Centre, the University of Melbourne. Her research includes cultural material and climate change; the investigation of artists' materials and techniques; attribution and authentication; collection development and history; community engagement in conservation; and the preservation of cultural materials in Australian Indigenous communities.

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