Conservation management plans as a climate adaptation planning tool

Jenifer White, Chartered Landscape Architect, Historic England

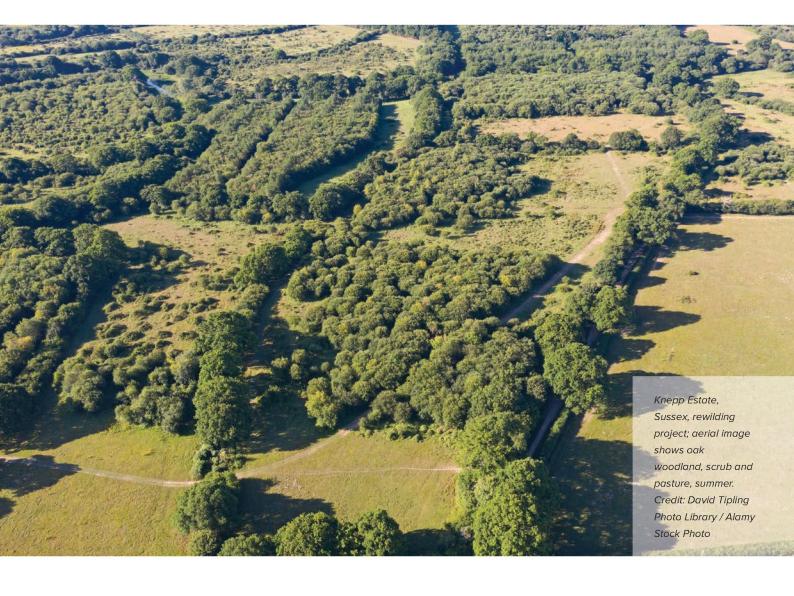
As I write, we've been taking stock at Historic England of the damage to registered parks and gardens, scheduled monuments and other nondesignated historic sites across northern England after Storm Arwen, 25–27 November 2021. The casualty lists sadly include champion, specimen and veteran trees such as the ancient 3.56m-girth crab apple at Croxdale.

The strongest of winds recorded was 98mph at Brizlee Wood in Hulne Park, part of the registered Alnwick Castle Capability Brown landscape in Northumberland. Many of these sites like Hulne Park include scheduled monuments and earthworks. The National Trust's initial estimate is that the restoration is likely to

cost at least £3million across its properties in England and Wales.

According to the Met Office there is currently no evidence for measurable changes in intensity or frequency of storms in the UK. But although the climate change link is inconclusive, the Met Office does predict more extreme weather events including storms in the future.

I got involved in the conservation of historic parks and gardens with the Countryside Commission as a result of the Great Storm in 1987. At the time this was presented as a one in 300-year event, the most serious since the 1703 cyclone. Some 15 million trees were lost and many historic parks and gardens badly damaged across a large swathe of southern England. The national Register of Historic Parks and Gardens of Special Historic Interest in England had only been set up four years earlier, so it was very much in its infancy as a designation. There were further storms at





Storm damage at Emmetts Garden in October 1987. Credit: The National Trust Photolibrary / Alamy Stock Photo

the beginning of 1990 which damaged sites in the South West. The 1987 storm catapulted work on grading and defining eligibility for grants from the £10m allocated by the Department of the Environment, as well as the use of conservation management plans as tools to understand the challenges and issues facing sites and programme restoration projects. Over the next ten years, the English Heritage team supported 280 schemes on Grade I and Grade II sites.

Ironically Storm Arwen hit at the start of the 2021 National Tree Week and the start of the winter tree planting season. In 2020 the government committed to trebling tree planting rates and establishing 30,000ha of new woodland in England by 2025. The new tree-planting measures are a central pillar in the efforts to reach net zero emissions by 2050. We are all aware of the importance of trees in the fight against climate change, but 'right tree, right place, right reason' is so very important, especially where infilling areas and planting up between planting clumps will lead to obscuring the historic layout. Back in 1987, in some places the storm actually helped reveal lost views and thin canopies to benefit plant collections and ground flora.

The palette of trees is inevitably changing too. Pests and diseases are already posing serious threats and adding to the costs of managing sites. In the longer term as temperatures intensify and we experience more droughts, some of our native British tree species will struggle to grow and thrive. Conversely, the many exotic trees that add colour and form to these landscapes may thrive. Site-specific, informed, conservation-led planning is needed to work out strategies to improve resilience, and decide what will need replacing, with what species, and when. This work requires a good understanding of the design layout, the role of individual features and the significance of species and their growth forms.

Changes in land use and management have led to huge native species losses and we are facing a biodiversity crisis. Understandably, the Knepp Wildland project in West Sussex and its offer of camping, glamping and safaris has stimulated lots of interest in similar nature recovery schemes and business development opportunities in country house parkland. However, wood pasture and parkland are UK priority habitats and



internationally important for ancient trees and rare species. These parklands also include other priority habitats such as some types of lowland grassland, woodlands and orchards. I find it baffling that there seems to be so much ecological interest in the possibility of rewilding and converting these special landscapes rather than their restoration and sensitive management. Through conservation management plans, we have a wellestablished approach for developing an understanding about the special qualities of each site, including aesthetics, and a holistic, viable and long-term management approach for the many different features: trees and woodland, grassland, water, views and vistas, paths and drives, boundaries, buildings and structures, and often archaeology. This mosaic of habitats is important. Nature conservation has



always been integrated as an objective in conservation management plans, and there is often scope to do more. There are also opportunities to enhance the setting of many parklands, and indeed to recreate the many lost parkland landscapes.

In urban areas, the variety of historic parks and green space types multiply to many different forms: public parks, town gardens, cemeteries and burial grounds, commons and heaths and more. Vestiges of past rural environments can often be found, such as ancient trees, parkland trees, orchard trees or wildflowers. Our urban green space heritage, including street trees and domestic gardens, is an important facet of the green infrastructure and it plays an increasingly vital role in tempering urban heat-island effects and water run-off. The historic green spaces are amongst the largest green infrastructure assets and their effective conservation management is vital to ensure they are delivering the full range of, and maximum, green infrastructure benefits, but their funding is often inadequate and precarious. These sites are also facing pressures such as tree planting and sustainable urban drainage schemes rather than being valued and managed as adaptation assets.

Historic parks and gardens are living landscapes, continually growing and maturing, and their conservation requires active long-term management. Planning for climate adaptation is complex because each landscape is different, and climate change impacts and land management consequences (and combinations and the scale of these impacts) will vary across the country and over time. The conservation Man standing at the foot of a magnificent cedar tree. Essex series Valentines Park, Greater London, Redbridge, Ilford – Nigel Temple Postcard Collection. Credit: Historic England Archive

management approach has been developed over 40 years and builds on a long history of recording, tracking and planning change – such as head gardeners' diaries and Humphry Repton's Red Books - and sites have had to adapt to changes such as extreme weather events like the 1987 storm and losses such as those resulting from Dutch Elm Disease. The landscape profession is trained to manage, develop resilience, adapt environments and take a long-term approach. Historic England's Conservation principles, policies and guidance (2008) provides a framework for planning climate adaptation, and we can use conservation management plans to review and plan for climate change impacts and the adaptation measures that might be needed.

Jenifer White

Jenifer is one of Historic England's six chartered landscape architects advising on the conservation and protection of historic parks and gardens. Based in the National Specialist Department, she leads on Historic England's historic designed landscape guidance, policy and research work.