

National Trust Deploys Lidar to Map Shropshire Estate in 3D



The National Trust has turned to aerial laser mapping to create accurate 3D models of the Dudmaston Hall estate in Shropshire, England. Working with aerial mapping company Bluesky, the Trust plans to improve access to the historically and culturally important estate. Measurements captured using aircraft mounted lasers have been used to create the 3D visualisations of the 17th century

country mansion estate and woodland areas. The Bluesky laser data, known as Lidar, is now being used to underpin and inform other survey activities, and allow for improved access to the estate through the design and creation of additional walking and cycling routes.

Sue Briggs, outdoors project manager for the [National Trust](#) at Dudmaston said they are always looking to improve the visitor experience at their properties through new attractions and better access to existing facilities. While they had some aerial survey images of the main hall and gardens, much of the estate was previously unmapped. Working with Bluesky to capture the Lidar and create detailed 3D visualisations, they now have a much better understanding of the topography of the site. The Bluesky Lidar data is already helping to plot routes through the woodland area for improved access by walkers and cyclists, and is underpinning other activities including an historical landscape survey and archaeological study, Briggs added

GIS and mapping systems

Bluesky undertook the Lidar survey in November 2016 in accordance with tight project deadlines and uncertain weather conditions. The resulting 16 ppm (points per metre) data was delivered to the client for use at both a local level and also in the main National Trust GIS and mapping systems by specialist staff and stakeholders.

Dudmaston Hall is a traditional example of a country estate comprising a late-17th century mansion, landscaped gardens, parkland, managed woodland, lakeside and farmland. Dudmaston also includes the nearby village of Quatt, a model village designed by London architect John Birch for the workers and tenants of the estate.

Today Dudmaston Hall estate contains an outstanding art collection, described as 'one of Britain's most important public collections of modern art', including sculptures by Henry Moore and Barbara Hepworth, plus an extensive collection of mid-20th century Spanish paintings and pottery.