

Restoration and Gnomonic Analysis of the Drummond Castle Obelisk Sundial

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The obelisk sundial at Drummond Castle in Perthshire, Scotland, dates from 1630. It holds an illustrious place in the history of the British Sundial Society. When the society was founded in 1989 Lord Drummond, 17th Earl of Perth, became the society's Patron. Dr Andrew Somerville, the society's first Chairman, took a great interest in the sundial at Drummond. He studied it closely and his notes are lodged with the archive of Historic Environment Scotland in Edinburgh.

The sundial has now been reinstated in the gardens of the castle after a three-year programme of restoration. A Sundial Reinstatement Ceremony was held on Sunday 23rd June 2019 at 11.00 am. Members of the family, their guests, and the many people involved with the restoration were invited to attend by courtesy of the Grimsthorpe and Drummond Castle Trust Limited. The gardens are open to the public.

The restoration work was carried out by Graciela Ainsworth Sculpture Conservation Ltd at their workshops in Edinburgh, in consultation with Macmillan Hunter Sundials. The significant and extended work of stone repair and conservation was in the hands of Graciela's team of expert conservators. Alastair Hunter was able to continue the study begun by Andrew Somerville and take it to completion. He carried out gnomonic analysis in order to identify the multiple delineations on all of the 61 separate dials, to define the specifications for the manufacture of every gnomon in bronze, and to instruct on correct replacement for the entire set.

The multiple delineations, carved into the stone and overlaid one on another on many of the dials, include Babylonian, Italian, Temporal, and Common hours, plus Zodiac and Horizon lines, and so-called Azimuth circles in the numerous dials that are spherical. These delineations are defined in a Latin inscription which also explains how the lines were coloured. Reinstatement on a true north alignment was completed on 21st June the day of Summer Solstice. At noon the shadows of the gnomons on multiple dials in sunshine revealed accurate alignment.

