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Evaluating the influence of ivy canopy cover on brickwork: A case study from Warnham, West Sussex, UK

Martin Coombes and Heather Viles

Oxford Rock Breakdown Lab, School of Goegraphy and the Environment, University of Oxford, United Kingdom (martin.coombes@ouce.ox.ac.uk)

Biogeomorphological understanding is becoming increasingly applied in a range of environmental management contexts. The concept of 'bioprotection' is of particular relevance in the built environment. Here, the influence of higher plants on the condition of buildings and building materials, particularly vulnerable historic structures, is of great interest for conservationists and managing authorities tasked with preserving built cultural heritage. Ivy (Hedera spp.) is a widespread and prolific creeping and climbing plant that is commonly found on built structures. Opinion varies as to whether ivy is good or bad for buildings, but there is evidence to suggest it can have both protective and deteriorative influences. Here we present a case study assessment of ivy removal from a brick and mortar wall (c.100 years old) in West Sussex, UK. Using measurements of hardness (Equotip L), moisture (protimeter %WME) and visual inspection we find that the condition of brickwork varied with ivy canopy cover extent, but that this effect was not consistent between different heights on the wall. The roles of ivy in moderating wall moisture dynamics is discussed as a possible contributing factor.