

Stone Decay in Central Oxford

Weathering Forms and Processes:

EROSIONAL

Erosion



Erosion of corners of balustrade – after intense gypsum crust development and cleaning, Ashmolean Museum.



Serious erosion of sandstone plinth underlying limestone ashlar and columns, Beaumont Street.



Scratch marks on Bath stone ashlar from bicycle handlebars, Beaumont Street.

Dissolution



Dissolution focused along bedding planes, St. John's College.

Flaking



Flaking of ashlar block, St. John's College.



Flaking of Bath stone after cleaning, Ashmolean Museum.



Salt tide and roughened flaking surface caused by salt weathering, Beaumont Street.

Pitting



Pitting orientated along bedding planes, St. John's College.



Pitting, roughened texture at base of column – possibly caused by salt weathering, Beaumont Street.



Blackened pits visible on the north-facing façade of Oriel College on High Street.

Blistering



Blistering of stone encrusted with black, gypsum-rich crust, St. John's College.



A blister/scaling developed on ashlar block, Beaumont Street.

Exfoliating crusts



Exfoliating crust on a sheltered section of Headington freestone ashlar above the plinth at the Bodleian Library.



Exfoliating framboidal gypsum crust on Headington freestone also above the plinth at the Bodleian Library.

Rilling



Possible rills visible on the cleaned façade of the Modern History Faculty on Cattle Street near Hertford College.

Salt weathering



Pitting, roughened texture at base of column – possibly caused by salt weathering, Beaumont Street.



Salt tide and roughened flaking surface caused by salt weathering, Beaumont Street.



Left hand column base shows roughening due to salt weathering on right hand side, Beaumont Street.

Cavernous Weathering



Cavernous weathering in the boundary wall of Magdalen College on the east side of Longwall Street, with mortar standing proud of friable and crumbling blocks of recently cleaned limestone.



Close-up of cavernous weathering on this recently cleaned part of the boundary wall.

DEPOSITIONAL

Encrustation



Blistering of stone encrusted with black, gypsum-rich crust, St. John's College.



Thick black crusts on Headington freestone in a sheltered portion of wall under a window sill of a south-facing cottage on Hollywell Street.



Black encrustation intact, in a sheltered section of a west-facing wall at the University Church of St. Mary the Virgin, but peeling and removed where the plinth protrudes.

Salt Deposits



Salt tide and roughened flaking surface caused by salt weathering, Beaumont Street.

Soiling



Patchy soiling in hollows of shelly Portland stone (Roach), Ashmolean Museum.

Biological Colonization

Algae



Green algae on the plinth at the north-facing façade of Oriel College, High Street.



Green algae following the drip-line on a west-facing wall at the Bodleian Library near the Sheldonian.



Green algal cover on stone and mortar, St. John's College.

Lichen



Lichens growing on a south-facing string course at Magdalen College on High Street.



A view of the variety of lichens that can be found lower down on the same string course.



Close-up of the variety of lichens growing lower down on the string course.