

## Historic Churchyards Project News Article 16.01.2012.

### Natural damage to stone

Natural damage, from frost, ice, rain and wind together with the effects of woody plants, speeds up the decay of carved stones and masonry in historic churchyards.

In the depths of winter, extreme temperature variations, wind and rain, sometimes combining with the detrimental effects of tree and ivy growth, can cause damage to carved stone monuments and masonry in historic churchyards. Wind can cause damage even in summer and in June 2011 ivy was blown off the Simprim mausoleum in Coupar Angus Abbey churchyard, taking with it some of the slates and the skewes (or sloping stone copings on gable walls). Fortunately repair and restoration work to the B-listed building is set to begin.



Simprim Mausoleum

Many historic gravestones and buildings are built in sandstone which is relatively soft. Freeze thaw action can shatter stone, when water penetrates the stone, freezes and as it does expands, contracting when it melts leading to stone shattering, dissolving or otherwise breaking. Roots growing between stones or on the surface can allow water penetration followed freezing and thawing and ultimately stone decay or damage. It is particularly disastrous when a stone which should be vertical is laid flat as water collects and freezes causing damage to the stone surface.

Perth and Kinross Council has a superb selection of 18th century stones which are mostly sandstone of varying softness. Buildings and walls also tend to be built in sandstone and where it is soft, open-grained or laminar (or layered) it is liable to erosion, of being worn away by the weather. In the old part of Caputh graveyard the carved surface of an 18th century stone of heritage interest has shorn off. Evidence of delamination, where layers of stone separates and may split off, can be seen in many historic churchyards.



Caputh 18<sup>th</sup> C stone

Also in Caputh, trees have been blown down both in May and in December 2011 and the stone boundary walls have been damaged. It was fortunate that the Delvine McKenzie mausoleum, which is believed to be a part of the former Medieval church (although much altered), was not flattened. Majestic redwoods, cypresses and other tall trees, which however attractive, are generally inappropriate to a small historic graveyard, can represent a threat to historic buildings and monuments. In Cargill two mature beech trees blew down before Christmas and toppled a classical column and an obelisk.



Large trees at Caputh

At Rait there are two large sycamores which have self seeded (the 1911 postcard and the current photo show the difference in 100 years all due to unchecked tree growth). They will be felled with the utmost care in January 2012. Ivy causes untold problems when left unchecked. Kinfauns Old parish church was partially cleared of ivy in September 2011. The ivy growth had reached tree trunk proportions and had to be carefully cut and treated. Interesting stone features, but equally, much damage was revealed and the medieval masonry will require to be restored. It is planned to continue ivy clearance work with volunteers in February 2012.



Rait today



Rait 1911



Kinfauns