

10. Caring for Stonework, Metalwork and Woodwork



This sheet gives guidelines on the management of stone, wood and iron features.

Early crosses, stone sculpture and medieval tombs are relatively rare and their significance is recognised by statutory protection such as English Heritage Listing or Scheduling. Their conservation requires special care and expert advice. Consult organisations such as:

- Diocesan Advisory Committees
- Government advisers on the historic environment
- Conservation architects

Management of monuments and memorials needs to be considered at three levels:

- Individual monuments
- Groups of monuments
- Landscapes of memory – entire burial sites

Individual monuments and groups of monuments are prone to damage from erosion, unmanaged vegetation or scrub, instability, vandalism, rearrangement and clearance.

MANAGEMENT ADVICE

Tasks suitable for volunteers

Volunteers can help with maintenance work such as the management of invasive plants, recording inscriptions and photographing monuments and carrying out condition assessment. NB condition assessment will not include monument safety unless the assessor is both trained and insured for this work.

Consider:

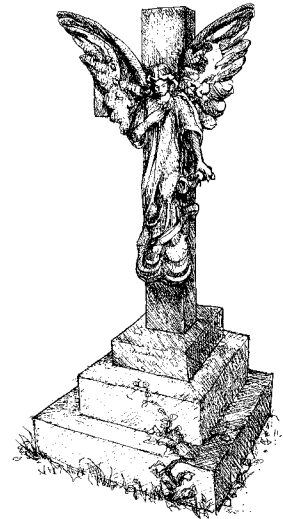
Keeping memorials and monuments that you are sure are safe, free of woody stemmed plants such as saplings or brambles. Ivy does not often damage stonework and can actually protect it from air pollution and extremes of weather which cause erosion. Ivy can, however, damage more elaborate memorials that comprise stone sections with joints. The ivy grows into the joints or any cracks and crevices and pushes them apart. Ivy can also make memorials impossible to see or to inspect, so you may decide to clear it. If you do, then gently pull it from the stone, starting at the top.

Do not cut the ivy stem and leave the remainder to die. Cutting the stem encourages rooting into the stonework

thus causing damage. (See sheet A9, Pesky Plants and Animals). NB ivy may actually be holding a monument together, or may be concealing chips and breaks. By clearing the ivy you may precipitate the need for repair so think carefully before starting.

Leave a small section of long grass around a monument and cut it carefully with shears (you may choose to cut this once or twice a year rather than every time a site is mown). This prevents damage from mowers or strimmers coming too close.

On no account use herbicide around memorials – it is damaging to stonework and creates bare areas for invasive plants to establish.



Care of stonework where professional advice and permission may be required

When stones are broken or flake and crumble with weathering it may be possible to repair them if this is a priority. Graves and monuments are often the property of the heirs of the deceased. Prior to carrying out repairs it is important to try and track down any family members who have responsibility for the monument. Advice on conservation work should be sought before embarking on restoration. Try your local diocesan staff, county archaeologists, stone conservators, church architects and historic building advisers. The English Heritage publication 'Caring for Historic Graveyard and Cemetery Monuments' is a useful reference.

If a very significant monument is weathering quickly, the best advice may be to consider moving it inside a building or under cover. This is an extreme measure and do not disturb or move any historic stonework without the necessary permission.

As a general rule monuments should only be cleaned if the soiling is actually damaging the stone. Cleaning with chemicals and wire brushes is not recommended. This can actually make stone more prone to deterioration as it roughens the surface. Better to appreciate the lichens and mosses



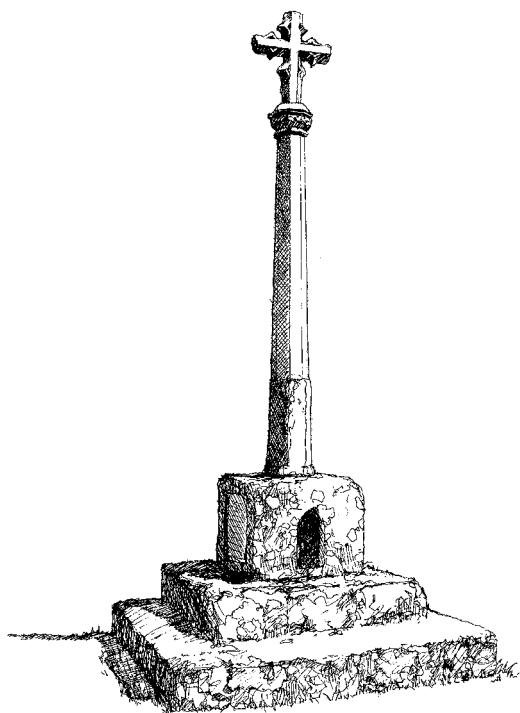
Maidenhair Spleenwort

10. Caring for Stonework, Metalwork and Woodwork

growing on the monument. A few lichen species can damage susceptible stone types however, so seek advice from conservators and lichenologists if this appears to be the case.

Graffiti removal should be carried out as soon as possible after the graffiti has been applied. This requires an experienced operative in order to avoid any imbalance in the appearance of the stone. The advice and experience of a conservator may also be required.

The application of coating systems such as graffiti barriers can change the appearance of the stone and is not generally recommended.



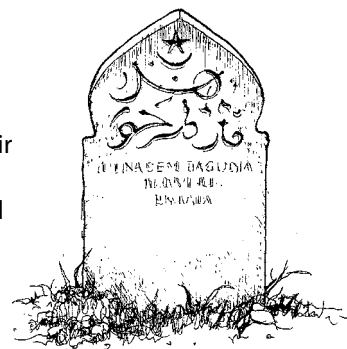
Stonework safety

Please refer to your insurance and/or church authority guidelines on this subject.

In the Anglican Church for example, it is the responsibility of clergy and Parochial Church Councils (PCC) to take proper care to ensure the safety of visitors to churchyards. The PCC has an Occupier's Liability for the safety of visitors and those working in the burial ground. The owner of a memorial (the purchaser or, following their death, the heirs of the deceased) has the legal responsibility for its maintenance, including its safety. The monumental mason has a duty of professional care to the purchaser for ensuring that the monument is stable and secure. However, the ultimate responsibility lies with the 'occupier', who is, in the case of churchyards, the clergy and PCC. Ensure that whatever is carried out in the churchyard for purposes of safety is notified to the PCC's insurers, and their advice considered.

Serious injury and even fatalities can occur when stones fall over.

Oddly enough, old headstones made of one solid slab of stone, even if found to be leaning at an acute angle, are usually very stable because of their monolith construction and the fact that one-third of the stone is buried in the ground. On the other hand some quite recent 'lawn type' memorials can be inherently unstable, because the dowels or cement connecting the slabs quickly corrode and disintegrate.



RECORDING

Memorials and monuments can be of interest to the historian, artist, architect, geologist and genealogist.

There are a number of recording systems available for recording memorials and monuments and inscriptions. Here are a few:

The Federation of Family History Societies has over 160 member societies, all helping their own members to research their ancestors in England, Wales and Ireland. Contact them for information on memorial inscriptions.

The Churches Conservation Trust's Good Gravestone Recording Pack is a comprehensive pack containing everything needed to record and understand historic gravestones.

Council for British Archaeology publication – Recording and Analysing Graveyards by Harold Mytum. This book aims to inspire action in the form of recording and analysing graveyards and monuments.



10. Caring for Stonework, Metalwork and Woodwork

Burial Grounds of England Survey

This digital system links photos, inscription recording and condition reporting to a digital map. It can be uploaded onto the Church Heritage Record and Church Heritage Cymru, databases holding information on all burial grounds, not only those associated with churches.

HISTORIC METALWORK AND WOODWORK

Burial grounds may have both wood and metal features, sometimes very old. Metalwork is generally iron, either wrought or cast, whilst wood tends to be oak due to its strength and durability.

Metalwork

Ironwork

Ornate Victorian cast ironwork is a feature of churchyards and cemeteries. Iron railings can be found on boundaries or decorating individual graves or groups of graves. Ironwork can be incorporated into lychgates or decorative gates.

Cast iron became popular for decorative ironwork from the 1750s. Created in moulds, cast iron gives an identical repetitive pattern. It is fairly resistant to corrosion but being brittle it cracks under stress.

Wrought iron has a high tensile strength and the earliest railings were wrought iron which is worked while hot requiring the traditional skills of a blacksmith. Many iron structures were removed during WWII, to be used in armaments. Look out for the stumps of sawn off railings.

Historic ironwork is difficult to repair and requires sensitive conservation.

Surveying ironwork

It is sensible to check metalwork looking for the following:

- Corrosion such as paint blistering and pitted surfaces.
- Oily residue on the surface indicating that paint is breaking down or there is corrosion underneath.
- Chipped paintwork.
- Missing or damaged sections.
- Staining from rust or cracks in masonry in contact with the metal.
- Gate hinges which bind or squeak.

Bronze

Formed from copper and tin, bronze is very resilient and can be found as an ornament to monuments. Verdigris, a green pigment formed when bronze is weathered and exposed to air or water over a period of time, can cause staining. Bronze corrosion is usually superficial.

Lead

Lead is a very soft metal which was used in statuary but most commonly used for lettering to monuments. Lead as statuary can split and slump under its own weight and lead lettering can detach from monuments.

Woodwork and timbers

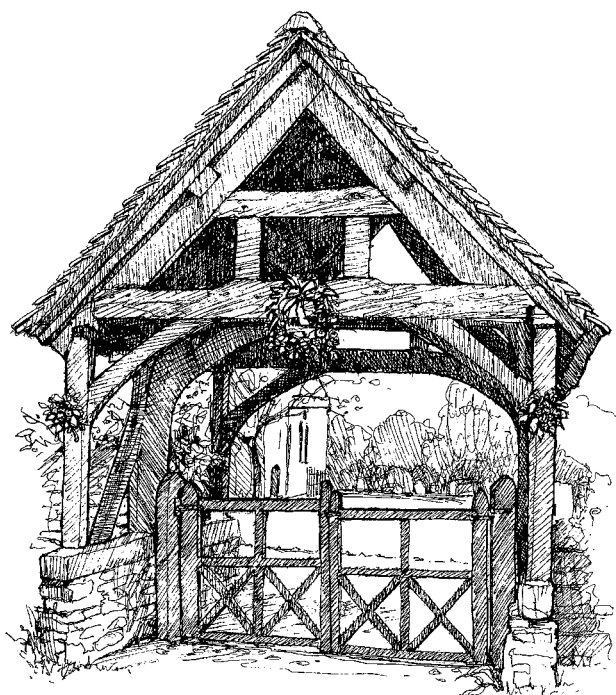
Oak timbers were used in the construction of lychgates, structures built at the entrance to churchyards in Britain. In churchyards and burial grounds oak has also been used for gates, outdoor seating and for memorials.

Most parts of the oak tree are full of tannic acid or tannins. It is these tannins that make the heartwood exceptionally durable outdoors without treatment. The tannin can be seen as 'ink stains' on iron due to a chemical reaction. Hence outdoor oak timbers are secured with wooden pegs or other metals containing no iron.

Oak is a remarkable wood, being very strong and durable outdoors and not requiring any preservative treatment.

Please note

When repairing or restoring woodwork or metalwork seek any necessary permission and take advice.



10. Caring for Stonework, Metalwork and Woodwork

Useful contacts

Church of England, ChurchCare, www.churchcare.co.uk

Church in Wales, www.churchinwales.org.uk

Local Authority Archaeological Services

National Association of Memorial Masons, www.namm.org.uk

National Federation of Cemetery Friends, www.cemeteryfriends.org.uk

Society for the Protection of Ancient Buildings, www.spab.org.uk

War Memorials Trust, www.war memorials.org

Statutory government agencies:

Cadw, www.cadw.gov.wales

Historic England, www.historicengland.org.uk

Historic Scotland, www.historic-scotland.gov.uk

Northern Ireland Environment Agency, www.daera.gov.uk

Useful reading

Caring for Historic Graveyard and Cemetery Monuments – English Heritage publication

English Churchyard Memorials – Frederick Burgess, Lutterworth Press

Managing the Safety of Burial Ground Memorials – Ministry of Justice publication

Practical Handbook in Archaeology 15 – Council for British Archaeology publication

Recording and Analysing Graveyards – H. Mytum, Practical Handbooks in Archaeology 15