



How to fill out the CSA's Gravestone Recording Forms

PART FOUR: CONDITION: GENERAL DAMAGE, PLANTS, ANIMALS AND PEOPLE (Gravestone recording form including condition survey only)

Part Four of the gravestone recording form deals with the gravestone's general condition. It details any evidence of repairs and damage caused by people, plants and animals. It includes information on all signs of damage not related to weathering.

PART 4: Condition: General Damage, Plants, Animals and People.		
18. MOVEMENT: Has the memorial		<i>If relevant describe movement in more detail, noting any evidence as to why this may have occurred</i>
sunk or become buried?	No <input type="checkbox"/> Yes <input type="checkbox"/>	
collapsed or fallen over?	No <input type="checkbox"/> Yes <input type="checkbox"/>	
been repositioned?	No <input type="checkbox"/> Yes <input type="checkbox"/>	
Is the memorial leaning?	No <input type="checkbox"/> Yes <input type="checkbox"/>	

• 18: Movement



Figure 40
Example of a sinking gravestone

Look at the gravestone you are recording and tick the relevant box if there any signs of the gravestone having moved in some way. If it is possible to say why the stone might have moved or to describe what has happened do so in the space provided.

A sinking or buried gravestone might have earth banked up around its base and may have some of its inscription or decoration partly buried (Figure 40). With buried gravestones, only part of the stone might be visible poking through the turf or ground surface.

A gravestone that has collapsed or fallen over might have: been deliberately laid flat on safety grounds, maliciously toppled over or fallen because of weakness in its foundations (see for example Figure 9).



Figure 41
Inscription showing that the gravestone has been moved

A repositioned gravestone might occasionally have an inscription saying that it has been moved, though this is quite rare (See Figures 26 and 41). Sometimes a gravestone will have been moved as a burial ground is being cleared. Stones might be placed against the burial ground wall or reset elsewhere, like the gravestones in Figure 42.



Figure 42
Repositioned gravestones

A leaning gravestone might be displaced forwards, backwards or to one side (see Figures 4, 5 and 11).

• **19: Breakage**

Note here whether the gravestone is currently broken and, if so, show what kind of damage has happened. Space is provided here if you are able to give more details about the breakage, or any evidence of why breakage might have happened.

19. BREAKAGE: Is the stone currently broken? No go onto the next section Yes fill in the section below
 Have the upper parts of the memorial become separated from the base? No Yes
 Has decorative carving been lost from the stone? No Yes
 Have elements, such as panels, finials or columns, become detached? No Yes
 Has other breakage occurred? No Yes state
If relevant describe breakage in more detail, noting any evidence as to why this may have occurred

Record any chipping and scratches to stonework in question 20. If the stone has been broken in the past and repaired, note these details in question 21.

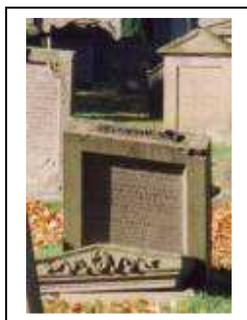


Figure 43
Detached pediment

The upper parts of some gravestones can become detached if the fixings holding the stone together break or fail. An example of this might be a freestanding cross that is fitted into a base. Many headstones are built in two or more parts and things like pediments that sit on top can become separated from the rest of the memorial (Figure 43)

Decorative carvings can be vulnerable to damage if they stand proud of the surface of the gravestone (i.e. are carved in relief or attached to the stone).



Figure 44
Detached gravestone fittings

Finials and columns can become separated from gravestones if their fixings become weakened (Figure 45). Sometimes these pieces might be left near the base of the gravestone they were formerly attached to or they might be gathered together in one corner of the graveyard (Figure 44).



Figure 45
A headstone that has lost its finial



Some gravestones use fitted panels, often in a different type of stone, for the inscriptions or other decoration. Made of thin slabs of stone, these panels can sometimes fall out or crack and break (Figure 46).

Other kinds of breakage covers any damage not covered above. For example, perhaps a stone has broken into two as a result of falling over (Figure 47).

Figure 45
Broken marble panel in sandstone surround



Figure 47
Broken headstone

• **20: Is the memorial chipped or scratched?**

20. IS THE MEMORIAL CHIPPED OR SCRATCHED? No Yes If relevant describe damage in more detail, noting any evidence as to why this may have occurred



Figure 48
Chips and scratches from grass mowing

Tick to show whether your gravestone has any scratches or chips. If possible give more details about the damage and note any evidence for how the chips or scratches might have happened in the space provided.

Chips or scratches on gravestones can be caused by a variety of factors. Cleaning moss or lichen with the wrong kind of tools, such as wire brushes or metal scrapers, can leave a gravestone's surface scratched. In this photograph (Figure 49), a rake has been used to clear moss from this flat graveslab. When gravel is laid around gravestones, scratches can be caused by gravel or chippings hitting gravestones (see Figure 59).



Figure 49
Scratches from a rake

Grass cutting is another potential cause of scratching, either from lawnmowers striking the sides of gravestones or trimmers being used around bases (Figure 48). Stones lying flat can be damaged if mechanical or buggy mowers run across them. Question 23 asks for more details about grass cutting but note any damage you see here.

• **21: Repairs, Cleaning and Re-Use**

Question 21 asks you to indicate if there are any signs that the gravestone has been repaired, cleaned or re-used.

If any of these have taken place, give a description of what has happened and note down any evidence why the work might have taken place. Where repairs have been made to a gravestone, tick the materials that have been used.

<p>21. REPAIRS, CLEANING AND RE-USE</p> <p>Has the memorial been:</p> <p>Re-used? No <input type="checkbox"/> Yes <input type="checkbox"/></p> <p>Cleaned? No <input type="checkbox"/> Yes <input type="checkbox"/></p> <p>Repaired? No <input type="checkbox"/> Yes <input type="checkbox"/></p> <p>Please indicate any material(s) used for repairs:</p> <p>Stone <input type="checkbox"/> Concrete <input type="checkbox"/> Iron <input type="checkbox"/> Steel <input type="checkbox"/> Lead <input type="checkbox"/></p> <p>Resin <input type="checkbox"/> Cement mortar <input type="checkbox"/> Lime mortar <input type="checkbox"/></p> <p>Other <input type="checkbox"/> state</p>	<p><i>Please describe repairs, cleaning or re-use in more detail, noting any evidence as to why this may have occurred</i></p>
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Figure 50
A re-used gravestone
(with detail of inscription)

Re-used gravestones might be older memorials which have been used to mark more recent burials. One example of this might be part of an older memorial reset in a newer stone surround or as in the case of Figure 50 an old piece of stone may be reworked into a entirely new design. Sometime a reused stone will note that it is so by an inscription that says 'revived'.



Figure 51
A partially cleaned
marble headstone



Figure 53
Headstone with iron
clamps

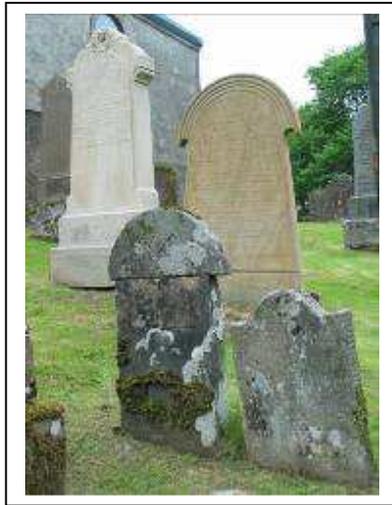


Figure 52
Two fully cleaned sandstone headstones (background). Two un-cleaned sandstone headstones (foreground)

With cleaned stones (Figures 51 and 52), all or part of the gravestone's surface might be cleaned giving it a crisp and unblemished appearance. If you think a gravestone might have been cleaned, check its date and look at other of a similar age for comparison. If you find other stones of the same age are crusted with lichen and moss, then cleaning may have taken place.

Repaired gravestones might involve cement or lime mortar, new stonework, or fixings made of metal, such as ties, straps or props.

Iron props might be found supporting headstones (see Figure 30) while iron staples and clamps are used to hold together cracks, fractures and, in larger monuments, blocks of stone.



Figure 54
Headstone with iron
staples



Figure 55
Stone repair fixed with
lime mortar

Stone was often inserted to replace damaged corners on a gravestone. Repairs didn't always involve new material being added, For example a stonemason's mistake or a change to an inscription might involve cutting out a name or word, leaving a recessed area on the surface.

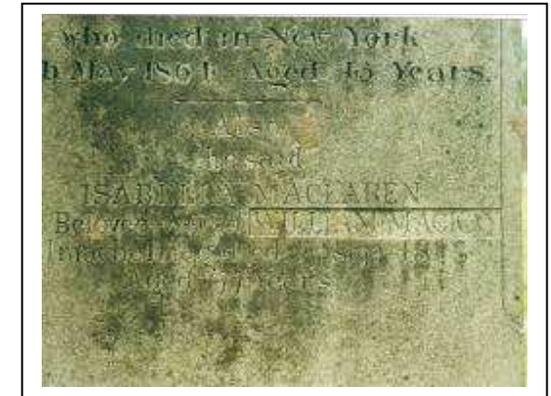


Figure 56
Recessed area on a
memorial where a layer of
stone has been removed

Resin, lime mortar or cement are all used to bond broken gravestones together. Resin has a hard and glue-like appearance when dried. To help recognise the difference between lime and cement run a finger across the mortar. A Lime mortar will leave a light-coloured chalky residue on your finger (Figure 57), while a cement mortar will be harder and rougher to the touch and leave no residue (Figure 58). Concrete is often used to reset or to build new bases for older gravestones (Figure 59).



Figure 57
Lime mortar plug



Figure 58
Repair using a cement mortar



Figure 59
Gravestone repair using concrete

• **22: Vegetation**

This part of the recording form notes the presence of vegetation on the gravestone, any damage that this might cause, and whether any nearby trees are causing the gravestone problems. While surveying a gravestone, you might find that there's more than one kind of plant or organism growing on it. The 'Guidance Note: Lichens, Algae and Mosses', available from www.scottishgraveyards.org.uk, provides information on how to recognise all three types of growths.

Most types of lichens sit very tightly on the surface of the stone. Attempting to remove them without specialist knowledge can cause damage to the gravestone's surface (Figure 61). Ivy (Figure 60), Trees and shrubs are another source of damage to gravestones. Tree trunks and roots might undermine or push over gravestones as they grow. Diseased trees can collapse and smash memorials as they fall. Shrubs and other woody vegetation can take root in a gravestone's joints or in crevices, slowly pushing stonework apart as the plant grows (see for example Figure 2).



Figure 60
Ivy overgrowth

Biological growths thrive in damp or wet conditions. For porous stones like sandstone, limestone and marble, dampness can cause serious problems. Often long streaks of algae can be found on gravestones where the shape or design of the stone channels rainwater. Alternatively, a gravestone that's often in the shade of trees or buildings might have algae

To complete this section you need to spot whether there's any vegetation growing on the gravestone and then gauge how much of the face it covers. Notes below give advice on how to determine and record the extent of vegetation. Space is provided for you to describe any damage being caused by vegetation. Knowledge of which way north points is needed here to make sure you can correctly orientate each face of the gravestone.

Figure 61
Damage to stonework associated with lichens



22. VEGETATION: tick the relevant box below to show presence and the extent of vegetation.

LOCATION	LICHEN					ALGAE					MOSS					IVY					OTHER PLANTS									
	N	S	E	W	U	N	S	E	W	U	N	S	E	W	U	N	S	E	W	U	N	S	E	W	U					
Top 1/3	<input type="checkbox"/>																													
Middle 1/3	<input type="checkbox"/>																													
Bottom 1/3	<input type="checkbox"/>																													
All over	<input type="checkbox"/>																													
EXTENT	N	S	E	W	U	N	S	E	W	U	N	S	E	W	U	N	S	E	W	U	N	S	E	W	U					
Minor	<input type="checkbox"/>																													
Moderate	<input type="checkbox"/>																													
Major	<input type="checkbox"/>																													

Please describe any damage caused to the memorial by the vegetation

Are any trees or shrubs causing damage to the memorial? No Yes *please describe*

growing on it because it never gets enough sunlight to properly dry out. Mosses have primitive roots that need soil to thrive and over time can burrow into the surface of the gravestone. Ivy bonds very tightly onto stone surfaces and can prove very damaging to gravestones made of slate and sandstone. On these kind of gravestones, ivy can peel away entire layers of stone. Being both tenacious and quick growing, ivy is difficult to remove from gravestones without causing further damage.

Type of Vegetation	Scale of Problem:		
	Level 1- Minor	Level 2- Moderate	Level 3- Major
<p>Lichen Lichens appear as crust-like coverage or leafy roughly circular splodges that sit tightly on the stone's surface. Several different species can colonise a single memorial in a patchwork of colours. They can appear all over a stone but are less tolerant of moisture than moss and algae.</p>	Scattered small spots.	Large blotches.	Continuous thick layer.
<p>Moss Mosses appear as patches of green, 'furry' growth, which need soil and moisture to grow. The more foliage the moss has shows the higher level of moisture in the stone.</p>	Small spots.	Continuous strip or larger patches.	Continuous thick layer.
<p>Algae Algae appear as green, red, orange or brown powders or strands, which can sometimes appear 'slimy'. Their coverage may look like streaks or a stain-wash on a memorial's surface. Algae favour areas on a stone that retain moisture. Their location can show water run-off patterns. Algae does best on porous stone types such as sandstone but can also be found on harder stone such as granite. Algae are not true plants so do not have roots or leaves but instead exist as single cells.</p>	Light coloured layer or patch that does not obscure the stone surface.	Darker in colour, but stone surface still visible.	Dense coverage through which the stone's surface cannot be seen.
<p>Ivy Ivy is a climbing plant with lobed, roughly triangular evergreen leaves and black berries, which is very damaging on soft stones. It's tendrils adhere to gravestone's surface, and eventually the weight of the ivy can pull a layer of stone away from the face of the memorial.</p>	Surface is covered with ivy but no damage is visible.	Minor damage visible.	Major damage visible.
<p>Other planting Grassy weeds and / or other plants with 'woody' stems rooted in masonry joints or crevices.</p>	Small patches of young grassy weeds.	Strip or multiple patches of weeds.	Mature and abundant growth of grassy and / or woody plants.
<p>Trees Damage from tree growth resulting in the stone becoming displaced or causing structural damage.</p>	Minimal displacement, with no structural damage to the stone.	Stone displaced, and may show structural damage.	Stone displaced showing major structural damage.



Figure 62
Extent of moss growth here, to the upper and lower thirds of the gravestone is major



Figure 63
Extent of lichen growth here is major



Figure 64
Extent of algae coverage here is major

• **23: Grass cutting**



Figure 65
Use of grass killer around flat stone

21. GRASS CUTTING:	
Has grass killer been used around the base of the stone?	No <input type="checkbox"/> Yes <input type="checkbox"/>
Has turf been removed from around the base of the stone?	No <input type="checkbox"/> Yes <input type="checkbox"/>
Has grass cuttings been left on the surface of the stone?	No <input type="checkbox"/> Yes <input type="checkbox"/>
Is there any evidence of damage to the memorial from grass cutting?	No <input type="checkbox"/> Yes <input type="checkbox"/> <i>state below</i> See 18 <input type="checkbox"/>

The way in which grass cutting is managed can influence a gravestone's condition. **Use of grass killer, turf removal, leaving grass cuttings on a stone and damage from machinery** are all detrimental to a gravestone's well-being. Using the tick boxes, indicate whether any of the below factors are relevant to your stone.

The use of **grass killer** can be recognised by a ring of yellowed and dead grass around the base of a gravestone. When rain falls, chemicals in the grass killer



Figure 66
Grass killer used around headstone in foreground. Flat stone in the background covered with grass-cuttings.

can be splashed onto the gravestone's surface and may hasten stone decay (Figures 65 and 66).

Grass cuttings left on the surface of a gravestone can also cause problems, particularly for stones lying flat on the ground. As grass cuttings biodegrade, they become acidic and this can damage the gravestone stone. Also, a build up of grass-cuttings can, over time, allow plants to start growing on the surface of the gravestone. Roots of these plants can cause problems for the gravestone.

Removal of turf (Figure 67) leaves a ring of exposed soil around the base of a stone. Turf removal is carried out to reduce the need to cut grass close to gravestones. However, removing the turf promotes soil erosion and can lead to gravestone foundations becoming exposed and unsafe (see Figure 30).

Damage from grass cutting typically includes scratching and chipping of a gravestone's surface (e.g. Figure 68). If

used too close to gravestones, grass trimmers can scratch the surface of gravestones. Damage to a gravestone's corners might be a result of being struck by lawn mowers. Large mechanical mowers can badly damage gravestones laid on the ground or flat graveslabs if run straight over them.



Figure 67
Turf removed from around headstone



Figure 68
Chipped headstone from grass-cutting

• **24: Animals**



Figure 69
Flat stone with animal burrow adjacent

22. ANIMALS: Is there any evidence of damage by animals, for example through burrowing, heavy bird droppings, damage from hooves or use of the memorial as a rubbing stone? No Yes *please describe*

Animals are a source of potential damage to gravestones. Tick the appropriate box to show if there's any evidence of damage caused by animals, and if so include a description of the any damage on the form.

Burrowing near gravestones (Figure 69) can cause foundations to become destabilised. **Bird droppings**, alkaline in nature, may trigger stone decay in large quantities. In addition, if bird droppings build up they can encourage biological growths and plants to grow on gravestones. If **used as a rubbing stones** by animals, gravestones can become unstable or be knocked over. **Animal hooves** can scratch or chip a gravestone's surface.

- **25: People**

Work through the possible ways that people may be in contact with the gravestone.

23. PEOPLE:	
Is the grave visited and tended?	No <input type="checkbox"/> Yes <input type="checkbox"/>
Is there any graffiti on the memorial?	No <input type="checkbox"/> Yes <input type="checkbox"/>
Is there any crayon / rubbing marks on the memorial?	No <input type="checkbox"/> Yes <input type="checkbox"/>



Figure 70
Graves with flowers and plants

Signs that a **grave is being visited** might include a well-tended plot with flowers or ornaments (Figure 70). You may also find evidence of visits connect with family history, or other cultural interests, from notes left at the graveside – or in the case of Figure 71, a business card tucked into the stonework.



Figure 71
Business card left on gravestone



Figure 72
Crayon marks left by gravestone rubbing

Graffiti may be scratched onto the stone's surface, sprayed or with markers or crayon. Marks made by people taking **rubbings** might be mistaken for graffiti. Crayon marks caused by taking rubbings are likely to be around the edges of decoration or the inscription panel (Figure 72).

- **24 Is there any other damage or other factors causing problems to the memorial?**

In this final section include any signs of damage or problems associated with the gravestone not already covered.

<p>24. IS THERE ANY OTHER DAMAGE OR OTHER FACTORS CAUSING PROBLEMS TO THE MEMORIAL?</p> <p>No <input type="checkbox"/> Yes <input type="checkbox"/> <i>please describe</i></p>
