

**Report on the Condition and Conservation evaluation visit to
Kremenets and Vishnevets District Jewish Cemeteries,
Western Ukraine**



21st - 25th April 2007

**On Behalf of The Kremenets-District Jewish Cemeteries
Restoration Project**

Introduction

Between the 21st and 25th of April 2007, the author, at the invitation and in the company of, Dr Ronald Doctor, Co-Coordinator of the The Kremenets-District Jewish Cemeteries Restoration Project, visited both the Kremenets and Vishnevents Jewish cemeteries and other associated sites.

The aim of the visit was for the author to examine the sites to assess the condition of the cemeteries, both as major heritage sites and also as large diverse collections of individual stone artefacts. The object of the assessment was to gain a good understanding of the deterioration processes active at the sites and also the rate at which deterioration is occurring. Once the parameters of the deterioration process are understood it becomes possible to design a conservation plan, devised of both passive and remedial measures that will utilise available conservation resources in the most effective and cost efficient way.

This report will look at each cemetery or site with regard the condition of the site and identify general threats and causes of deterioration affecting the site as a whole. The report will then go on to identify specific threats to the grave markers and other artefacts within the individual sites. The report will then offer both short term solutions aimed at stabilising any serious problems requiring immediate interventions and then outline long term treatments and interventions aimed at improving both the overall condition of the monuments and the aesthetic appreciation of the sites.

Kremenets Cemetery

General Observations

Kremenets cemetery is by far the largest of the sites visited, containing in excess of eight thousand graves. Located on a fairly steep hillside the cemetery has obviously been neglected for a substantial period. Recently the area has been cleared of trees and undergrowth to reveal the full extent of the cemetery and the extent of the boundary wall.

The graves in the cemetery are extremely densely packed and it is only possible to determine the existence of one possible access path into the centre of the cemetery. Graves appear to have been cut in every possible location and it may be the case that small paths were gradually lost, as through lack of space, graves encroached on to the older access paths.

With the exception of a very limited number of high status burials the graves appear to be shallow cut and don't appear to utilise sarcophagi or any other form of sub-surface structure. This has led to subsidence in many areas of the cemetery, due to either settling of headstones toward newer grave cuts or gradual erosion of the soil down the hillside.

Kremenets cemetery has undoubtedly suffered vandalism in the past, but happily there is no apparent evidence of recent damage. A few of the grave markers have recesses cut to accept bronze plaques, which without exception are missing, presumably removed for their scrap value.

A large proportion of the headstones are broken, predominantly those nearer the road at the bottom of the site. While these are the older graves there is no evidence of these being constructed from an inferior stone which may be more prone to environmental damage, nor more prone to natural collapse. On the contrary the graves at the base of the cemetery are on flatter and therefore more stable ground than the graves higher up the slope.

The perimeter wall of the cemetery has also suffered a large degree of material loss and it would not be unreasonable to assume that material from the cemetery has been taken for use in new construction in the surrounding neighbourhood. A survey of local building would quickly substantiate this hypothesis.



General view of Kremenets cemetery

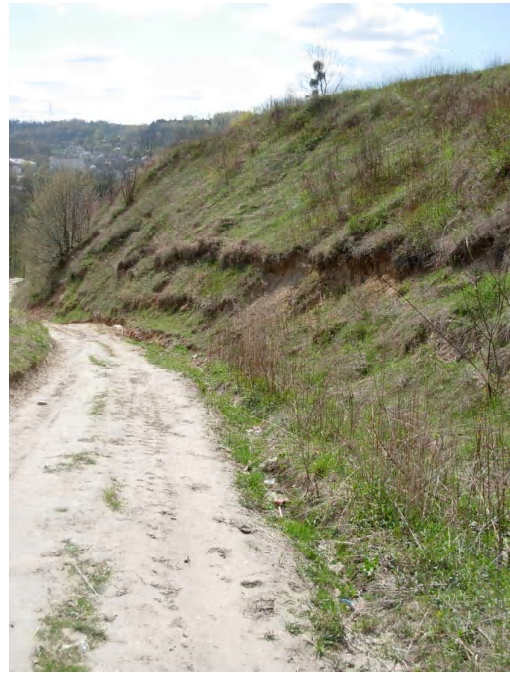


Subsiding graves on higher slope



Most intact section of the parameter wall

The most obvious sign of active deterioration at the site is on the bank adjacent to the road below the site. Here there is evidence of continual erosion of the slope and the presence of grave stone fragments at the base of the slope would suggest that erosion has now progressed to a point where it is encroaching within the boundary of the cemetery.



Actively eroding slope below cemetery

Specific Observations

Headstones

The headstones and grave covers of Kremenets cemetery, while often dislocated and sometimes damaged are in what appears to be a very stable condition. There is no apparent evidence of salt efflorescence and negligible occurrences of deterioration as a result of freeze/thaw cycling. While a few examples manufactured from granite and marble exist the vast majority are manufactured from what would appear to be a locally quarried or at least locally available limestone.

The visible surfaces of the headstones are uniformly colonised with lichens that obscure the inscriptions to some extent. The legibility of the inscriptions are however all obscured to the same extent, irrespective of the age of the headstone. Inscriptions from the eighteenth century are as legible as those from the twentieth century. This would indicate that once erected the surfaces of the gravestones erodes until it is colonised by lichens that once established, stabilise the inscriptions and dramatically reduce further deterioration of the stone surface. It should also be noted that there is little evidence of visible un-colonised stone surfaces, even at the base of the apparently subsiding stones. This could indicate that the stones are either toppling at a rate slow enough for the lichen colonisation to match the pace of movement, or that the stones having subsided, then became stable in the dislocated position and were then colonised.

As vegetation was cleared from the site the exposed headstones were recorded and numbered. Numbering was achieved by cleaning the surface of the stone and applying a painted number. Both the cleaning process, which appears to have been achieved by wire brushing the surface and the application of a paint layer that will kill the lichen, may leave irreversible discolouration and “shadowing” when the entire surface is subsequently cleaned.



Overall Assessment

The Kremenets cemetery is an extremely complicated and physically vast cultural resource.

While the Kremenets cemetery is undoubtedly dilapidated and has suffered loss of material through robbing for building materials, vandalism and maybe deliberate planned desecration in the Second World War, it was when viewed in a reasonable state of preservation. There is little if any evidence of recent deliberate damage or further erosion of soil down the slope (with the exception of the bank adjacent to the road) and resultant dislocation of the headstones at the upper level and burial of those at the lower extremes appears to have slowed to a minimal rate.

The substrate of the headstones is in good condition and well able to cope with the environmental extremes it is encountering and the lichen layer that has colonised the surfaces. While the lichens are undoubtedly causing gradual deterioration of the surface through root penetration of the stone surface, The colonisation is probably offering greater protection from damage resulting from environmental factors than it is in itself causing.

There is however cause for concern and these in the main result from the recent clearing of vegetation from the site.

As mentioned above the site has in the past suffered from severe erosion, causing dislocation and toppling of the headstones on the upper slopes and burial of those at the bottom of the hill. It would not be far fetched to assume that the stabilisation of the slope and the reduction in the rate of erosion may well have resulted from the colonisation of trees and shrubs. Now that this stabilising factor has been removed an increase in erosion rate may result.

Removal of the trees and shrubs has also greatly improved access to the cemetery. While this helps promote the cemetery to both the local and broader community, the attention that the cemetery may receive from an increase in visitor numbers may, without some form of control or custodial care, result in damage through lack of paths and specific routes through the site.

Suggested Short Term Interventions

Considerable effort has been expended to clear the cemetery of trees and undergrowth and record and number all the visible gravestones. Unless the botanical growth is continually removed, all the effort of the initial removal will have been in vain. A maintenance program needs to be put in place to keep the re-colonisation of plants in check. At the same time monitoring of the stability of the headstones with regard soil erosion needs to be undertaken. This can be achieved by noting the rate of exposure of stone un-colonised by lichens at the base of the headstones at strategic areas across the site.

Access to the site needs to be controlled and visitors encouraged to walk on predetermined routes through the cemetery, that give good access while steering visitors away from the more vulnerable areas of the site. A fence should be erected around the parameter of the site to limit access to predetermined entrances, where information in the form of presentation boards should inform the visitor on the history of the site and the restoration work being undertaken and explain the need to limit access to certain areas. As in most areas of the site access is extremely difficult due to the number and density of the graves, the original parameter wall should not at this stage be rebuilt, but enclosed by a temporary fence. In this way access by a conservation team to many restricted areas of the site can be simply achieved by removing sections of the fence. The wall can be rebuilt after the graves have been treated and the need for access is reduced.

The method of numbering of stones needs to be revised. The current method of painting numbers is both unsightly and short-term. With excess of eight thousand graves, it will be years before some headstones are cleaned and/or reset in position. In the author's experience, painted numbers can last for as short as one winter, especially if they are painted on top of a lichen layer that will die and detach from the stone surface taking the paint with it. Using the current methodology it will be necessary to check every number, every year. A system of much smaller, more permanent numbering should be devised, maybe pressed metal tags firmly adhered to the stones with a reversible adhesive. The physical labels should also be backed up by accurate maps, physical, digital or both, so that if a tag or number is lost or removed, the identity of the stone can be determined easily and accurately.

An annual inspection of the site should be undertaken to determine the ongoing condition of both the site and the individual gravestones, dependent on the results of the survey conservation interventions should be undertaken as required.

Finally a local custodian needs to be found who will monitor the site and report on problems to the responsible authorities and give information to visitors.

Long Term Interventions

If the recommendations above are implemented, deterioration of the cemetery should slow to a manageable pace and any problem occurring spotted in time for remedial action to be taken as required.

However, it is the stated intention to improve the condition of both the site and the individual gravestones, so as to allow scholarly study of the inscriptions, easier access to the individual conserved graves and interpretive information to a hopefully larger volume of visitors.

To achieve these aims requires a large long term commitment to the site and support of those undertaking the work. A wide ranging skill base, currently not available in the local community needs to be introduced and a culture of caring and understanding fostered within the local community (both governmental and popular). Lastly financial commitments to supporting the effort needs to be found for the period until a sustainable local management program can take over. In order to determine the level of funding required to undertake the entire project a number of pilot projects should be initiated in order to be able to accurately determine the time and resources and therefore funds required to complete the entire project.

Reconstruction of the cemetery will involve the necessity to excavate buried headstones and fragments, and establish the extent of each grave, removal of headstones and fragments from the site for cleaning and conservation and reconstruction of graves with the correct stone cover and headstone. Undertaking an intervention of this complexity can only be accurately undertaken if it is undertaken as an archaeological excavation by trained archaeologists and recorded to the highest possible standard.

One of the fundamental requirements is that headstone be relocated exactly where they were intend to stand. It is therefore imperative to record the exact position of each stone or fragment in relation to both each other and within the mapped topology of the site. To do this on the scale and accuracy required at Kremenets, in a time frame that will not impede conservation work can only be achieved by using a Geographic Information System (GIS) and accurate surveying technologies, which should be accurate to within a few centimetres*.

A Geographic Information System (GIS) is a set of computerised tools used to collect, archive, manage, retrieve, analyse and output geographic and other related kinds of attribute data. GIS records the geometry and location of real world features in layers of a digital map. A computerised map can be likened to an atlas of a specified geographic area, in which each page contains different types of information for example, topographic information, land use, elevation etc. When all layers are overlaid, a geographical database is created.

By using a GIS, heritage managers can generate permanent records of heritage sites; understand how cultural heritage relates spatially to its surrounding natural and human environment; communicate knowledge and network databases; test proposed development models and conservation strategies; facilitate monitoring and management of sites.

In the case of the Kremenets project a GIS would offer the huge advantage of linking the scholarly investigation to the physical remains at the site and allow for the very simple creation of maps and guides to the cemetery.

*For a very accessible discussion of the basics of GIS and its relevance to cultural heritage, see Box, P. GIS and Cultural Resource Management: a Manual for Heritage Managers. UNESCO, Bangkok (1999).
Download from <http://www2.unescobkk.org/culture/download/GISandCulturalResourceManagement.pdf>

An archaeological group needs to be formed and trained in the required disciplines of excavation and digital recording required. An excavation program aimed at clarifying the exact layout and position of the graves and the location of the headstone fragments should be developed. A program of excavation aimed at determining the parameter of the cemetery, its entrances and pathways should also be initiated.

A GIS should be established

A conservation workshop should be established as close to the site as possible and furnished with the required materials and equipment. Personnel, preferably local with a vested interest in the site should be recruited and instructed in the required disciplines of conservation and restoration required to undertake the project.

Once the above (both long and short term) are achieved it will be possible to begin a structured and disciplined investigation and reconstruction project. The first phase of the project would be to establish the true parameters and timeframe required and thus the true level of funding needed. This would be achieved by an initial pilot project involving the following.

Training of the staff in the required disciplines

The establishment of a GIS for the site

Selection of a small, easily assessed area for project development

Archaeological investigation of the selected area

Digital recording of the area (ongoing throughout investigation)

Addition of data to the GIS

Removal of material requiring conservation to workshop

Conservation of the selected objects

Reconstruction of graves within selected area

Scholarly investigation of restored area

Addition of study data to GIS

The result of the pilot project would be a very good understanding of tasks involved and a realistic knowledge of the time and resources required. It would then be possible to extrapolate the experience of the pilot project to be able to truly estimate the resources and time and therefore funding requirements for the entire project.

Vishnevets Cemetery

Vishnevets cemetery is in reality a small version of Kremenets with a few noticeable differences.

The graves and headstones are on the whole of a higher status than those of Kremenets, with relief cut inscriptions as opposed to the incised inscriptions and a much higher standard of ornamentation. More crucially the graves utilise sarcophagi set into the slope of the hill. The use of sarcophagi means that determining the original position of the grave is far easier than at Kremenets, resulting in the need for far less excavation than would be required at Kremenets.



Vishnevets Cemetery

The cemetery is grazed by animals and therefore has substantial less botanical cover than at Kremenets. There are however fruit trees planted on the cemetery. The fruit trees are mature and unlikely to cause any further damage to the graves through root penetration. The cemetery is almost completely covered with grass, which has stabilised the slope and there is no evidence of active erosion on any part of the site.

As with the headstones of Kremenets, the Vishnevets headstones are covered with a layer of lichens that are stabilising the stone surface, although somewhat obscuring the artistic detail and inscriptions. The lichens layer at Vishnevets is more substantial than at Kremenets and presumably results from the greater level of available light, as the cemetery has never been covered with trees.

Probably the greatest threat to the cemetery is from encroachment from the surrounding human habitation. The cemetery is directly adjacent to houses and cultivated land. At the top of the site is a ploughed area. The cultivate land does not appear to encroach on the cemetery, but it is very, very close.



Ploughed area adjacent to the cemetery

Another result of the closeness of habitation is the dumping of rubbish on the site. Two substantial mounds have evolved and in these areas trees and undergrowth are becoming established.

Suggested Short Term Interventions

The most important short term intervention at Vishnevets is the establishing and protection of the site boundaries with temporary fencing and removal of the rubbish heaps and associated trees and undergrowth. As with Kremenets the erection of temporary fencing should be accompanied by an information initiative to heighten awareness of the significance of the cemetery. Vishnevets



Rubbish dumped on the cemetery site.

cemetery is far more stable than Kremenets and should therefore be of less priority. Grazing of the land has greatly helped protect the graves from the destructive forces of trees and undergrowth and in the short term this should continue as should the existence of the fruit trees.

Someone owns the fruit trees and grazes the land, a simple compromise involving the granting of fruit gathering and grazing rights in exchange for custodial duties would greatly protect the cemetery and eliminate the need for continual manual control of botanical growth. Once the boundaries of the site are protected and access controlled the cemetery would be secure in the short term as long as a regular condition assessment is undertaken and any problems arising are immediately addressed.

Long term Interventions

If the interventions outlined above are undertaken, the cemetery should remain in a stable condition for the foreseeable future. If it is decided that the cemetery should be restored and the headstones cleaned to allow interpretation of the inscriptions, the method of initiation for the work would be identical to that at Kremenets. The two cemeteries should not be viewed as separate entities from the point of view of either conservation or Heritage Management, but just as two areas within the same broader preservation effort.

Headstones Under the Car Park of the Former Gestapo Headquarters

The car park of the former Gestapo headquarters had reportedly been paved with gravestones during WWII. The site was visited and although the area has subsequently been covered with tarmac, a number of stones were accessible and lifting a number determined that the rumour was true. Further investigation involving the removal of a small area of the tarmac and underlying levelling fill showed that the gravestones could extend over a large area and be substantial in number.

Recommendations

Although the history of how these stones ended up at this location is extremely unpalatable, it is the fact that these stones, having been laid face down and subsequently buried, have been well protected from destructive elements. The inscriptions on these stone were some of the best preserved examples viewed during the visit.



It has been proposed that the stones be removed and returned to the cemetery. While this is an obvious reaction, it cannot be stressed enough that unless very good storage facilities are available, removal could lead to accelerate deterioration of the stones. A project of recovery of these stones should be undertaken only as part of a much broader integrated conservation and management plan devised to encompass all the sites.

Conclusion

The protection, conservation and restoration of the Kremenets and Vishnevets Jewish Cemeteries represent a vast undertaking if it is to be undertaken to internationally agreed and accepted standards for the care of International Heritage*. The project will require the input of a large diverse group of specialist instructors representing a wide range of professions and skills if the project is to become sustainable in the long term within the local economy. Workshops need to be established and furnished with the required specialist tools and materials, Equipment and materials which will preferably be sourced locally to avoid the problems and financial fluctuations encountered when importing large quantities of materials.

The project will require a significant level of funding for a significant length of time and needs to be carefully planned and implemented if it is to be both cost effective and efficient. The project should be carefully phased so that development of suitable treatment options and application methodologies are developed and tested for suitability before large scale interventions requiring significant financial investments are undertaken. Throughout the project and at its conclusion the project should be published in professional journals so as to both publicise the project and promote it as a template for future similar projects.

Once the project begins the resulting potential increase in visitors will result in increased pressure on local tourist resources. The cemeteries form only part of the local heritage and should not be seen in isolation. If an increase in visitor numbers is not to have a detrimental effect on the local heritage resources, careful planning in cooperation with the local governing bodies and local communities need to be undertaken and the cemeteries incorporated in a local, comprehensive, conservation and management plan. The restoration and management project should be seen as a distinct intervention within the history of the sites with stated aims and an agreed end point. At the culmination of the project a trained and equipped conservation team will exist and a political situation needs to have become established where this resource is adopted by the local governing body for the purpose of continuing the maintenance of the cemeteries and other local heritage sites.

Undoubtedly the cemeteries are of great historical and cultural significance and should be conserved and restored, but to do so is a big undertaking that will take significant resources. For the project to be successful and the investment not wasted in the long term, not only does the physical structure need to be improved, but also the political and public culture of understanding towards the local heritage resource. The only group who can guarantee the future security and protection of the cemeteries is the local community. Equal effort should therefore be given to inclusion and motivation of the local population as to the restoration of the physical structures.

* Relevant UNESCO charters pertaining to international standards of heritage protection, conservation and management can be downloaded at <http://www.international.icomos.org/charters/charters.pdf>