

THE VALUE OF TOURS AROUND HERITAGE SITES WITH MELVILLE KOPPIES AS AN EXAMPLE

Wendy Carstens

Melville Koppies Nature Reserve and Joburg Heritage Site

wendavid@mweb.co.za

Abstract

Tours enrich and reinforce textbook and classroom history, inspire further study, and promote an appreciation of past cultures. This paper discusses the value of guided tours on Melville Koppies, a Nature Reserve and Johannesburg Heritage Site. Melville Koppies offers evidence of man-made structures and artefacts reflecting Pre-History from Early Stone Age to Iron Age in this undeveloped pristine reserve where the natural sciences and social sciences meet. The site includes evidence of gold mining attempts, the Second Anglo-Boer War and modern history up to present times. The panoramic view from the top ridges of the Koppies encompasses places of rich historical interest, of which many, such as Sophiatown and Northcliff Ridge, were affected by apartheid. Guided tours are tailored to educators' requirements and the age of students. These educators usually set their own pre- or post-tour tasks. The logistical challenges for educators of organising such three-hour tours are discussed. History, if part of a life-time awareness, is not confined to primary, secondary or tertiary learners. Further education for visitors of all ages on guided tours is also discussed.

Keywords: Wealth of evidence; Social and natural sciences meet; Guided tours; Enrichment.

Introduction

The content of even the most dynamic History lectures may be forgotten in time. However, if lectures are followed up by tours to relevant heritage sites that complement the lectures, this reinforces and enriches the learning experience. Heritage sites trigger interest, stimulate thinking and encourage further study. The condition of the site and its management can make a lasting impression, positive or negative, on school learners and students. Memories of a tour may linger for many years, particularly if the tours engage the senses or hold special memories of the visit, such as the fun of an impromptu game of soccer with local kids during a tour to the Blood River battle site, delicious cream scones at Smuts House, the lush leafy orangery at Melrose House (now

a restaurant) in Pretoria or the tap-tap-tap of a woodpecker in the forested section of Melville Koppies. Tours are much enhanced by the added input of knowledgeable and enthusiastic site guides, e.g. a guide is needed to point out ripple marks on rocks, evidence of the ancient inland sea at Melville Koppies.

Tours at Melville Koppies are very flexible and can be adapted to educators' requirements and the age of the learners/students. The focus could be on History (of a particular period or a general survey), Human Evolution, Geology, Geography, Ecology, Tourism, Art and even Life Orientation (experiencing exercise in a healthy environment). The presentation of information depends on the age of the learners and students. All tours allow for an easy integration of the social and natural sciences in this amazing outdoor classroom. A hike through the Koppies is also part of the experience and this makes learning fun.

Although this study emphasises heritage sites, visits to non-heritage sites can also stimulate thought. I regularly took my senior History pupils to a foundry in Springs to illustrate the modern process of iron manufacture when we were studying the Industrial Revolution, so tying up the past with the present. They were horrified at the noise and heat of this industrial working environment. The long-term commercial importance of the Discovery of Diamonds was emphasised by a visit to Debid where industrial diamonds are made. A visit to the Johannesburg Stock Exchange (JSE) made them more aware of the machinations leading to the Wall Street Crash of 1929 and the resultant Great Depression. The JSE was a very exciting place to visit when trading was still done from the floor with dealers shouting up at a man, walking on a narrow platform, who updated the latest prices on a huge chalkboard.

Where Melville Koppies is situated

Melville Koppies Nature Reserve and Heritage site lies between the suburbs of Melville and the Johannesburg Botanical Gardens in Emmarentia. The co-ordinates of the main entrance in Judith Road, Emmarentia, are 26° 09' 11, 4" S and 28° 00' 15, 8" E. The Koppies are a mere five km as the crow flies from the Johannesburg Central Business District (CBD) and about 35 kilometers from the Cradle of Humankind to the north-west.

What Melville Koppies offers – cultural heritage

Ancient history

Melville Koppies has an archaeological excavation site with primary evidence of Stone and Iron Age cultures.

In 1963, Revil Mason, Head of the Archaeological Research Unit at the University of the Witwatersrand (Wits), discovered the rim of what he realised was part of an Iron Age furnace at Melville Koppies. His excavations at site 7/63 revealed the remains of a furnace, subsequently dated at over 500 years old. Further excavations (site 9/70) around the furnace area uncovered Early, Middle and Late Stone Age tools. These deeper excavations were subsequently filled in for safety reasons, leaving just the exposed furnace of site 7/63. The furnace is protected by a metal cage with shatterproof glass, a roof and paved surrounds. The site was given national monument status in 1968 and then changed to the wider concept of ‘heritage’ status in 2000. All the original excavated artefacts and bones are in a provenance collection at Wits. The Stone Age tools on display around the furnace are examples taken from various other areas. Mason’s students continued with excavations at The Cave, site 9/65, uncovering bones of wild creatures which once roamed the Koppies, and in the topmost layers, bones of domestic animals of more recent pastoral inhabitants. An exciting find was the link shaft of a Bushman arrow. Mason surmised that the many unearthed broken pottery sherds are evidence of rituals carried here. Modern man still practises rituals under the rocky shelter of the overhang which forms the cave. Another furnace, dated to the 1820s, excavated at site 28/64 on Melville Koppies, was totally vandalised in 1998.

Mason mapped out traces of Iron Age stonewalling at Melville Koppies. Many of the rocks from these walls were removed before the Koppies were declared a nature reserve in 1959. Some of these rocks were used to build the retaining wall of Emmarentia Dam, built in 1905, or for residents’ rockeries. The hiking trails at the reserve include some of these remaining traces of homestead walling. One such site, revealed after a burn and now kept clear of high vegetation, has distinct outlines of individual huts. Hundreds of these homesteads once stretched north from Melville Koppies to the distant Magaliesberg. The only stone walling at Melville Koppies to have been reconstructed is that of the cattle kraal near the excavated furnace and Lecture Hut. Revil Mason also spent several hours assisting me with information for a PowerPoint CD I made of the ‘Archaeology and History of Melville Koppies’.

Recorded History

Mzilikazi moved into the area after fleeing from Shaka in the 1820s. He displaced the local people, until he in turn was displaced by trekkers under Andries Potgieter at the battle of Vegkop in 1836. Mzilikazi migrated west and then north to present-day Zimbabwe where his Ndebele people met the local Shona in what came to be known as Matabeleland.

A wave of trekkers crossed the Vaal River northwards after the British annexation of Natal in 1843 and Transorangia in 1848. Among them was one Gerrit Bezuidenhout who was granted title of the farm Braamfontein, an extensive area of 3500 ha which incorporated Melville Koppies. On receiving title to the farm, he transferred it to his brother FJ Bezuidenhout who then subdivided the farm into three sections. The section which includes Melville Koppies was bought by Lourens Geldenhuys in 1886, in the belief that the quartzite ridges contained gold. Blast holes, from the unsuccessful gold-prospecting attempts of his sons Frans and Louw, can be still seen on the Koppies. The Geldenhuys family left their mark on the area. Marks Park clubhouse in Judith Road, was originally Frans Geldenhuys' home. Judith Road is named after Frans' wife. The Council bought Frans' section of the farm in the 1840s for a park and cemetery, and by default Melville Koppies with it. Louw Geldenhuys' home, now a heritage site, is at 14 Greenhill Road. The suburb of Emmarentia is named after his wife. Louw, a politician, was part of the Volksraad that sent the ultimatum to Britain in 1899. Both brothers served in the Krugersdorp Commando in the subsequent war. A high vantage point on Melville Koppies is the site of a British gun emplacement during this war. Richard Hall, who spent many years caring for Melville Koppies, also researched many of its aspects for training for future guides. His History eco-module can be found on www.mk.org.za.

Panoramic view of notable landmarks and their history

Many of the landmarks, visible from the top ridge of Melville Koppies, have been adversely affected by apartheid.

In the south, the tall police flats looming over Sophiatown are a stark reminder of the forced removals and destruction of the freehold township in the 1950s. The Rand Afrikaans University, now the University of Johannesburg, was set up in the 1970s to counter the liberal influence of the University of the Witwatersrand (Wits). The white Tower of Light, visible in

the Central Business District, marks the location of Wits' West Campus. J.G. Stijdom Hospital was renamed after the anti-apartheid activist, Helen Joseph. The tall SABC building continues to be a controversial communications centre, with the flanking Hillbrow Tower and Brixton Tower part of the broadcasting platform for political ideologies. In the same area, sulphurous fumes were spewed out by the gasometers of the old gas works in Cottesloe until production stopped in 1964.

In the north, West Park Cemetery has many graves of South African history-makers. The elaborate 2014 official memorial to apartheid critic, dominee Beyers Naude, is prominent at the entrance. Here, in other sections at West Park Cemetery, also rest Herman Charles Bosman, whose short stories highlighted and ridiculed racial attitudes of rural Afrikaners; Helen Suzman, who fought a lone anti-apartheid struggle in parliament for many years; and a few young men who fought in the controversial Border War. In the distant east, in a different power context, the cooling towers of the re-commissioned coal-fired Kelvin Power Station can be seen on a clear day.

What Melville Koppies offers – Natural heritage

The ridges of Melville Koppies are part of the 2.9 billion-year-old Witwatersrand Supergroup, the West Rand Group, Hospital Hill Subgroup and Orange Grove Formation with quartzite and shale beds. The rocky ridges are composed of quartzite, metamorphic rocks which slowly erode to thin acidic soils. The valleys are more fertile as their softer sedimentary shale weathers more easily. Flora is adapted to the harsh conditions of the Highveld. Over 500 species of indigenous plants, collected from Melville Koppies, are in the Moss Herbarium at Wits. Fauna that survive at the Koppies are mostly small nocturnal creatures such as mongooses, hedgehogs, mole-rats, field mice and some reptiles. Over 200 birds have been recorded. The veld is alive with insects. Sadly, larger animals were killed and eaten many years ago and it would be unwise to introduce new game.

How did Stone and Iron Age Man survive at Melville Koppies?

On a guided walk around the Koppies, learners/students are encouraged to look at the natural resources and think about how Stone Age and Iron Age people survived in this living environment. This makes for an easy integration

of the social and natural sciences.

Guides arouse interest with appropriate leading questions.

- What materials do you think Iron Age huts were made of? (*Huts were made of grass, mud, saplings and rocks*).
- Where did people obtain water? (*They obtained water from the Westdene Spruit*).
- Why was the cattle kraal in the centre of the homestead? (*It provided better protection for the valuable cattle resource*).
- What grasses did cattle eat? (*They grazed on Rooigras {Themeda triandra} and other palatable grasses on the lower slopes*).
- What natural foods could people eat? (*They collected assorted berries such as Bloubos {Diospyros lycioides}, Wild apricots {Ancylobotrys capensis}, Stamvrug {Englerophytum magalimontanum}, nectar from flowers, edible roots and leaves*).
- What medicinal plants were used? (*They collected Fever tea bush {Lippia javanica}, Wilde Als {Artemisia afra} a cure-all for everything and Wild dagga {Leonurus leonotis} for snake bites, etc.*).
- Where and what crops were planted? (*Sorghum, millet, maize, leafy vegetables, melons and legumes were planted on the lower more fertile slopes*).
- How were animal hides cleaned and preserved? (*They were cleaned of flesh with a stone scraper and rubbed with tannin-rich leaves*).
- Why did the cattle dung smell sweet in early times? (*Cattle were not fed fishmeal or antibiotics*).
- What were the uses of dung? (*Dung was used to smear floors and line grain pots because methane gas from dung kills insects*).
- What did children do to help their parents? (*Girls planted, hoed, made food and beer and looked after siblings while boys looked after cattle and went hunting with their fathers*).
- What sort of skills would boys and girls learn? (*They learnt skills of tracking, hunting, fighting, farming, food preservation and preparation*).
- What sort of pets would they have? (*Their pets were young wild creatures such as tortoises, terrestrial birds, buck, etc.*).
- What materials were tools, arrow heads, spears and hoes made of? (*The process of napping, iron smelting and forging is explained by guides*).
- How was charcoal made by the iron-makers? (*A burning tree was smothered with soil to exclude oxygen*).
- Did they understand the chemistry of iron-making?
- How did they acquire this knowledge and skill?
- Who made the rules for homestead living? (*The Elders made rules*).
- What sorts of punishments were meted out?
- What are the pros and cons of lobola, now often replaced by an electronic transfer of funds equivalent to the cost of an appropriate number of cows?
- Were these civilised societies?

- What is civilisation?
- Why did this way of life disappear?

Visual aids are also used to aid understanding for younger learners/students and these include posters; large photos; models of a furnace, an Iron Age hut and the archaeological dig; and assorted artefacts (original and replicas). Learners/students can use original grindstones on site to prepare sorghum and maize for hypothetical porridge and beer. This hands-on experience is extremely popular and kids could grind away for hours. Some learners/students remark rather excitedly that their grannies use such grindstones in the rural areas, thus making history come alive.

The influence of the Melville Koppies on attitudes to early cultures

Younger learners are usually very enthusiastic about relating what they have learned in class to what they see at the Koppies, or to what their elders have told them. However, we have noticed the attitudes of some older students slowly changing from embarrassment at what they perceive to be the culture of rural country bumpkins to one of respect for these ordered societies. Their technology may appear primitive to us, but the iron tools they produced were of very high quality. This astounds the students.

Preserving heritage sites

School learners and students need to be encouraged to think about the preservation of heritage sites for the future. The condition of a heritage site can influence perceptions of the past. Well-cared for sites encourage a more positive appreciation of the importance of the heritage. Heritage sites in sensitive areas such as nature reserves need careful management for their preservation while still promoting and accommodating sustainable tours. Any heritage relics excavated by archaeologists need structures to protect them from the elements and from vandalism. Learners and students need to think about the costs of managing such sites and the source of funding. What sort of job opportunities could heritage sites offer?

How can the natural environment be protected?

At Melville Koppies, damage to the sensitive natural heritage environment is kept to a minimum by controlled access for educational tours, research, field work and sustainable activities such as group hikes. Braais, picnics, large parties and functions are not allowed. There is no electricity which is an additional desirable limiting factor. The existing ecologically hardened areas, restricted to three small areas, are well maintained. Further structural development is strongly discouraged. Any potential upgrading would need an environmental impact assessment to proceed. Guides explain the rules of walking in a reserve before the start of a tour, e.g. walk in single file behind the guide on the natural contour-accommodating paths. The possibility of meeting snakes in the veld helps to enforce this instruction. No souvenirs, except birds' feathers, may be taken. Only limited numbers of plant or insect specimens may be gathered for research. A mantra common to green spaces is, 'Take photos, leave only footprints'.

Managing ecotourism

Mass ecotourism is not sustainable in sensitive natural heritage areas unless it is very carefully controlled. A Geopark in China has a shrine which thousands of people visit daily. At a Geopark conference, a presenter explained that management of this Geopark has built a path with barriers to channel visitors in a one-way direction past the shrine. On a visit to Australia, I was impressed with the raised boardwalks of either wood or expanded metal which keep the thousands of tourists off the fragile undergrowth of the thousand-year-old towering rain forests. These boardwalks enable tourists to experience the magnificence of the forests in a sustainable way. According to Dr Melanie Duval-Massaloux, in a lecture at Origins Centre on the 11th February 2011, the rock art paintings in the Chauvet Cave in France were being damaged by hordes of visitors passing through. Unfortunately the cave is situated right next to a river very popular for water sports and the cave is an additional attraction. To save the cave, the authorities closed it and constructed an exact replica nearby for the masses of visitors to marvel at. This is not quite the real thing but a rather innovative compromise to protect the site.

In the Kruger National Park, the number of daily visitors entering the park is restricted to keep it a pleasurable experience, particularly when something interesting is spotted and cars swarm like bees around a honey pot. Mass

tourism is not a factor at Melville Koppies. Management controls access on organised guided tours and hikes, research and field work.

Funding heritage sites

When tourism is a major income generator, more funds can theoretically be spent on heritage areas. In a nature and culture heritage site, funding is needed for the conservation of the natural flora, maintenance of structures, maintenance materials, marketing, research, security, guides, training and salaries. A small sensitive urban reserve like Melville Koppies which cannot sustain mass tourism or large recreational crowds, is of necessity a low-impact attraction. Consequently, it receives little Council funding for maintenance because available funds in South Africa are generally spent on areas like manicured parks that can accommodate thousands of visitors. Since 1959, when Melville Koppies first became a protected area, volunteers have been closely involved in all aspects of management, including fund-raising – resulting in a well-maintained site. This trend of volunteers conserving natural heritage is not restricted to Melville Koppies or South Africa, as volunteers are active in such endeavours world-wide. Volunteers who are committed, passionate and knowledgeable about the value of their heritage make a significant contribution to both maintaining, preserving and promoting heritage sites. Melville Koppies is fortunate to have had a succession of such volunteers.

Learner and student projects

During tours, Melville Koppies guides discourage the completion of worksheets as school learners/students spend too much time filling in the gaps instead of looking, thinking and learning. Melville Koppies lends itself to a wide range of possible follow-up projects by educators. These include essays/debates/posters/brochures/plays/worksheets on topics such as the need for responsible management and preservation of such sites, tourism potential, the way of life of early cultures, Grade 10 Curriculum and Assessment Policy Statements (CAPS) heritage assignments and local history assignments for primary schools, the influence of gold on the environment, etc. Some educators assign specific projects for school learners and students to do at the Koppies, e.g. the Geology of the Koppies; designing hypothetical structures

for such an environment; art projects with details of flora or whole landscapes; designing a publicity brochure, etc. Learners and students on such focussed tours make notes, take photos and videos, and ask many pertinent questions.

Logistics of arranging tours

Tours take a lot of organising. Ideally, a tour should take place just after the appropriate material relating to a tour is formally taught at school so that learners can gain maximum benefit on the tour. The tour date has to fit in with the school/university timetable and colleagues' lessons. The number of learners/students able to be accommodated on a tour needs to be arranged with tour guides. Buses need to be booked. Costs include transport and a donation per child for the maintenance of Melville Koppies by the volunteer committee. The Gauteng Department of Education (GDE) requires four schedules to be completed by government schools before tours. The first schedule is for permission for the tour from the GDE. When this has been given, two more schedules need to be submitted about giving medical information of each pupil and parental consent. After the tour, another schedule requires a report on the tour. In addition, Melville Koppies must obtain parental/guardian consent on an indemnity form for every student prior to the tour. The liability forms are e-mailed to the institution as soon as a date is finalised. Tours at Melville Koppies usually take three hours which fit easily into school hours.

After all the arrangements have been finalised, the weather may play havoc on the day and the tour has to be postponed.

Scheduled tours and special tours

History should be part of a life-time learning experience. When people visit the Koppies on scheduled or special tours, they wonder how this pristine reserve manages to exist in the middle of Johannesburg. Learning about past cultures in a natural environment is often a totally new experience for visitors. Volunteer guides introduce local and foreign visitors to all aspects of this heritage site and also share snippets of information and anecdotes about significant landmarks seen from the top ridges. In this way, guides create an awareness of history, encouraging people to think about past cultures and the importance of preserving this unique natural treasure for future generations.

References

- Fennel, D 2008. *Ecotourism*. 3rd edition. Oxon: Routledge.
- Hall, R 2005. Eco-module. Available at www.mk.org.za. Accessed on 15 November 2014.
- Huffman, TN 2007. *Handbook to the Iron Age*. Cape Town: University of KwaZulu-Natal Press.
- Lucas, A & Pike, B 1971. OUP. *Wild Flowers of the Witwatersrand* (illustrations). Cape Town: Purnell.
- Mason, RJ 1962. *Prehistory of the Transvaal. Johannesburg*. Department of Archaeology, Johannesburg: University of the Witwatersrand.
- Mason, RJ 1971. *Prehistoric Man at Melville Koppies Johannesburg*. Occasional paper 6. Department of Archaeology, Johannesburg: University of the Witwatersrand.
- Mason, RJ 1986. *Origins of the African people of the Johannesburg Area*. Johannesburg: Skotaville Educational Division.
- McCarthy, T & Rubidge, B 2005. *The story of Earth and Life*. Cape Town: Struik.
- Thomas, V & Grant, R 1998. *Sappi Tree Spotting Highveld and the Drakensberg*. Johannesburg: Jacana Education.
- Van Oudtshoorn, F 1999. *Guide to the grasses of Southern Africa*. Pretoria: Briza Publications.
- Van Wyk, B & Malan, S 1997. *Field Guide to the Wild Flowers of the Highveld*. 2nd edition. Cape Town: Struik.
- Van Wyk, B-E, Van Oudtshoorn, B & Gericke, N 2009. *Medicinal Plants of South Africa*. 2nd edition. Pretoria: Briza Publications.