

U. SHORES

Desk Note U10f2b. Noetsie – Archaeology (Klipdrift Complex)



The Klipdrift Complex.

U. SHORES

Desk Note U10f2b. Noetsie – Archaeology (Klipdrift Complex)

Noetsie, situated on the rocky shore of the De Hoop Nature Reserve, is an overnight accommodation site of the Whale Trail. It is also the point from which one can access the Klipdrift Complex (KDC) – a cave and a shelter, used by Stone Age people (Figures 1 to 3).

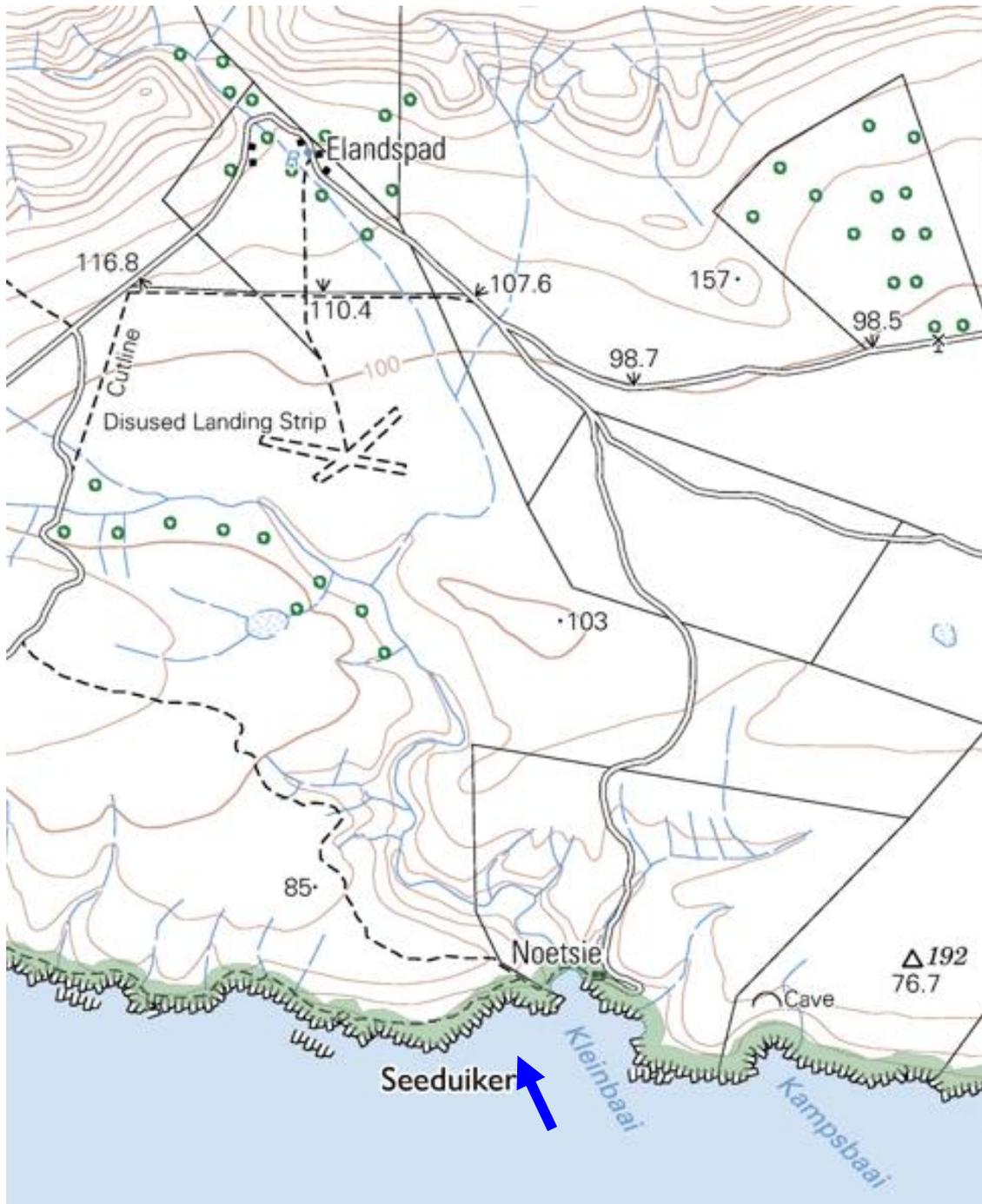


Figure 1. Topography map (1:50,000) of Noetsie area. Blue arrow points to the location of the Stone-Age Klipdrift Complex (cave and shelter). (The cave sign east of Noetsie marks a minor overhang).



Figure 2. Topography map (1:10,000) of Noetsie shore and the hills to the north, showing the high relief of the area. Arrow points to the location of the Klipdrift Complex.



Figure 3. Satellite image of Kleinbaai and the hills to the north, showing the locations of Noetsie (white arrow) and the Klipdrift Complex (yellow arrow).

The Klipdrift Complex (KDC) is located west of Kleinbaai (Figure 4).



Figure 4. Top and bottom – views on the Klipdrift Complex from the east.

A path at the foot of the cliff, above the boulders west of Kleinbaai, leads to the Klipdrift Complex (Figure 5).



Figure 5. The lower path to the Klipdrift Complex.

The Klipdrift Complex was inhabited during the Middle to Late Stone Age (65,000 to 59,000 years before present). During Late Pleistocene (124 to 13 kabp) sealevel was gradually dropping and the shore retreated to many kilometres southwards (Figure 6).

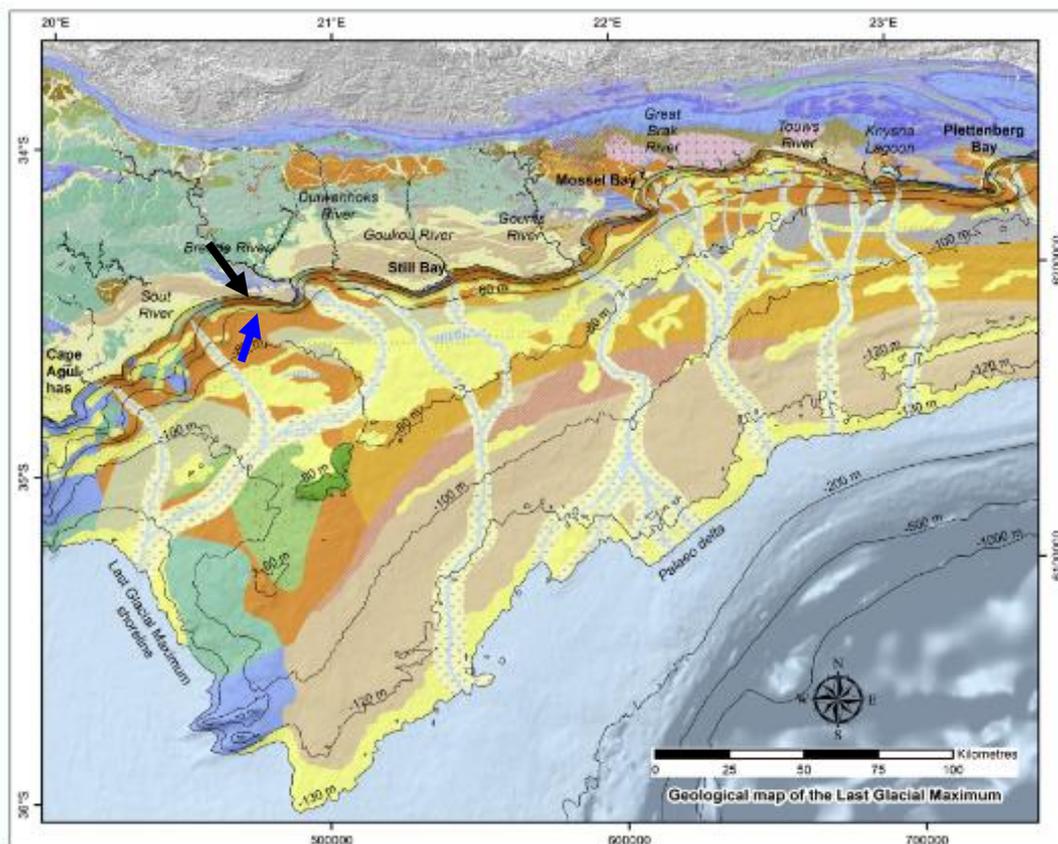
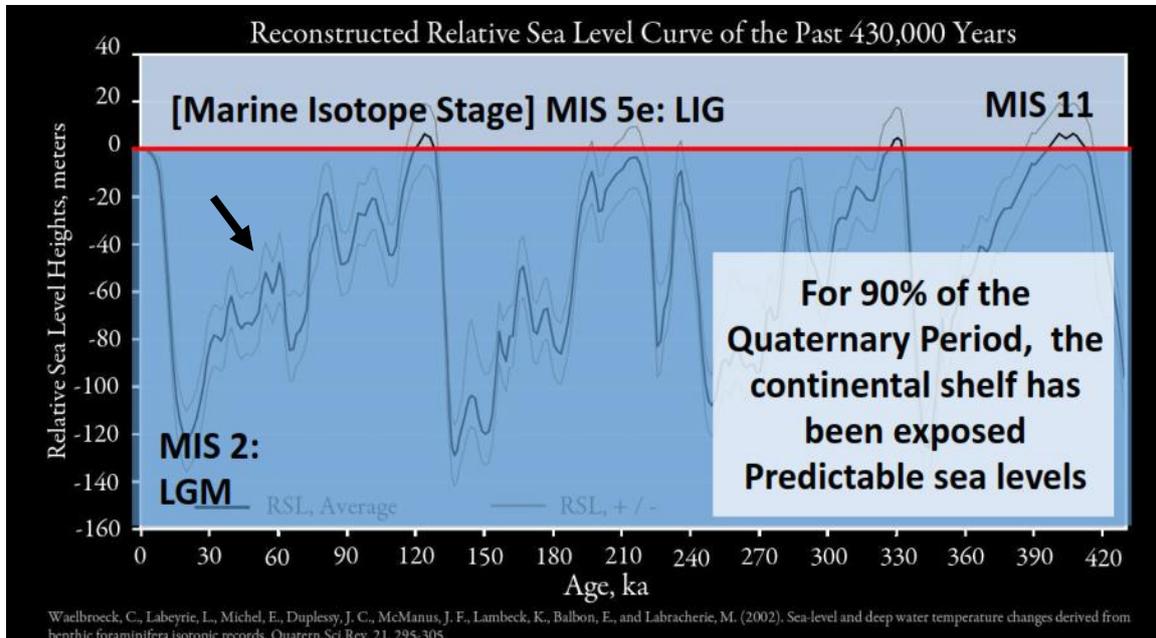


Figure 5. Sealevel changes and shoreline migration during late Pleistocene in the Palaeo Agulhas Plain. Top – sealevel changes graph for late Pleistocene: arrow points to the approximate sealevel during the occupation of the KDC. Bottom – sediment map of the paleo Agulhas Plain: black arrow points to the location of KDC; blue arrow points to the approximate location of the shoreline at that period.

Sources: Top – HC Cawthra, Presentation to the Overberg Geoscientists Group, 2021; Bottom – HC Cawthra et al 2020.

The KDC was excavated and studied by archaeologists from 2010 to 2014 (Figures 7 and 8).



Figure 7. The Kipdrift Complex excavations. The red arrow points to a ladder system leading to the complex from the rocky shore; the black arrow points to a system of ropes and ladders which was installed to let access to the KDC from the west; the yellow arrow points to the cable, which was used to deliver food, water and equipment to the complex from the landing on the east. (See Figure 8).



Figure 8. Top - the ladder and rope system (arrow) west of the KDC. Bottom – the landing (arrow) from which supplies were lowered to the archaeologists. on the east side.

The following pages are excerpts from the paper:

Journal of Archaeological Science 45 (2014) 284–303



Contents lists available at ScienceDirect

Journal of Archaeological Science

journal homepage: <http://www.elsevier.com/locate/jas>



Klipdrift Shelter, southern Cape, South Africa: preliminary report on the Howiesons Poort layers



Christopher S. Henshilwood^{a,b,*}, Karen L. van Niekerk^a, Sarah Wurz^{a,b}, Anne Delagnes^{c,b}, Simon J. Armitage^d, Riaan F. Rifkin^{a,b}, Katja Douze^b, Petro Keene^b, Magnus M. Haaland^a, Jerome Reynard^b, Emmanuel Discamps^a, Samantha S. Mienies^b

^aInstitute for Archaeology, History, Culture and Religious Studies, University of Bergen, Øysteinsgate 3, N-5007 Bergen, Norway

^bEvolutionary Studies Institute, University of the Witwatersrand, 1 Jan Smuts Avenue, Braamfontein 2000, Johannesburg, South Africa

^cUniversité Bordeaux 1, CNRS UMR 5199 PACEA, Equipe Préhistoire, Paléoenvironnement, Patrimoine, Avenue des Facultés, F-33405 Talence, France

^dDepartment of Geography, Royal Holloway, University of London, Egham, Surrey TW20 0EX, UK

ABSTRACT

Surveys for archaeological sites in the De Hoop Nature Reserve, southern Cape, South Africa resulted in the discovery of a cave complex comprising two locations, Klipdrift Cave and Klipdrift Shelter. Excavations commenced in 2010 with Later Stone Age deposits initially being recovered at the former site and Middle Stone Age deposits at the latter. The lithic component at Klipdrift Shelter is consistent with the Howiesons Poort, a technological complex recorded at a number of archaeological sites in southern Africa. The age for these deposits at Klipdrift Shelter, obtained by single grain optically stimulated luminescence, spans the period 65.5 ± 4.8 ka to 59.4 ± 4.6 ka. Controlled and accurate excavations of the discrete layers have resulted in the recovery of a hominin molar, marine shells, terrestrial fauna, floral remains, organic materials, hearths, lithics, ochre, and ostrich eggshell. More than 95 pieces of the latter, distributed across the layers, are engraved with diverse, abstract patterns. The preliminary results from Klipdrift Shelter presented in this report provide new insights into the Howiesons Poort in this sub-region and contribute further to ongoing knowledge about the complex behaviours of early Homo sapiens in southern Africa. Excavations at the Klipdrift Complex will continue in the future.



<p><i>Secrets of De Hoop and Environs</i></p>	<p>Field notes on the GEOMORPHOLOGY, HYDROLOGY and ARCHAEOLOGY Between CAPE AGULHAS and CAPE INFANTA</p>	 <p>Geomorphological Research</p>
---	--	---

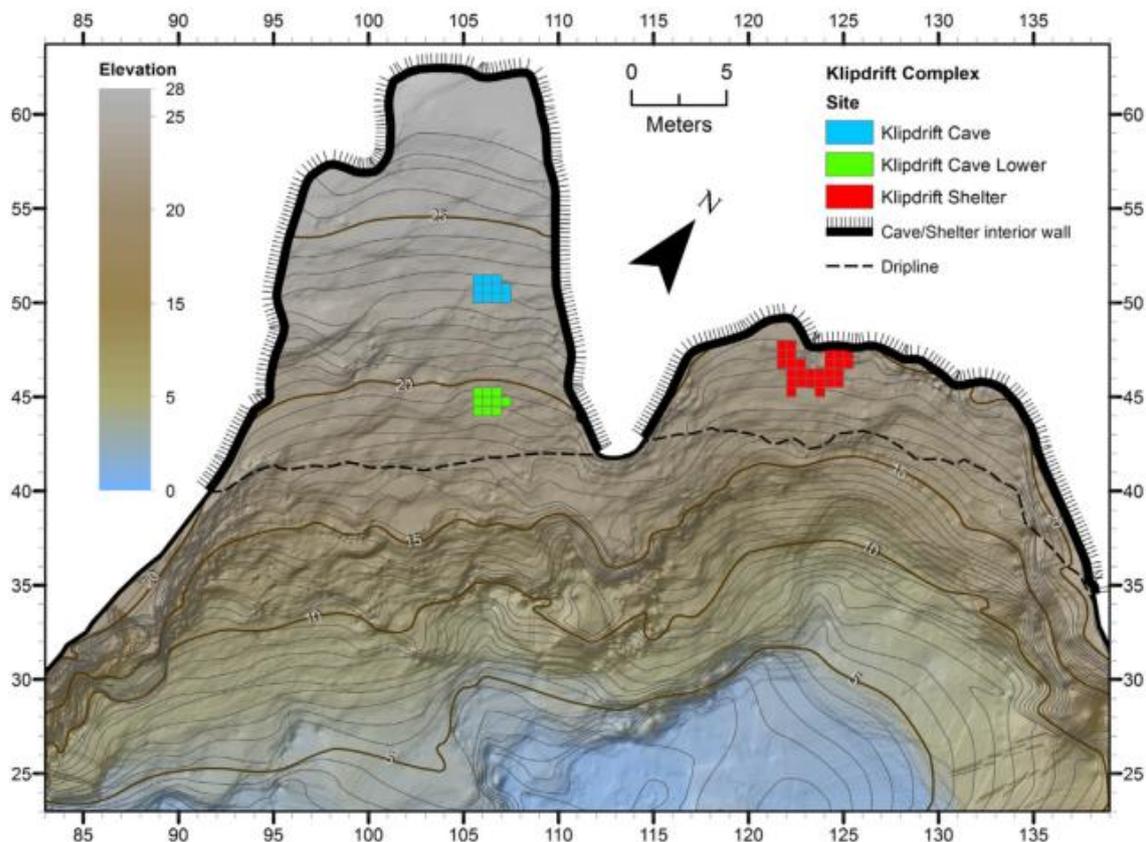
Introduction

From 1998 to 2009 intermittent archaeological site surveys by two of the authors (CSH and KvN) along 60 km of coastline located in the De Hoop Nature Reserve, southern Cape, South Africa (Fig. 1) resulted in the detailed mapping of more than 160 archaeological sites. In 2010 two of the sites that comprise the Klipdrift Complex, Klipdrift Shelter (KDS) and Klipdrift Cave (KDC), were selected for test excavations (Figs. 1–3). The excavations form a part of the *Tracsymbols* project, funded by a European Research Council FP7 grant (2010–2015) (<http://tracsymbols.eu/>), with one key aim being to initiate new excavations at Late Pleistocene archaeological sites in southern Africa. The selection of the Klipdrift sites was

based on their visible, *in situ* Later Stone Age (LSA) and Middle Stone Age (MSA) deposits, the preserved fauna and their relative accessibility. In 2011 test excavations commenced at KDS (Figs. 2 and 3) revealing c. 1.6 m deep, well preserved, horizontal MSA deposits immediately below the steeply sloping, eroded surface (Fig. 4c). The clear separation of stratigraphic layers enabled the accurate recovery of materials from discrete depositional layers. The anthropogenic assemblage contained marine shells, terrestrial faunal remains, microfauna, a human tooth, organic materials, ash lenses and hearths, lithic artefacts, ochre and ostrich eggshell. In 2012 we initiated test excavations at a second MSA site within the complex, Klipdrift Cave Lower (KDCL) (Figs. 2 and 3).

Here we report on the preliminary analysis of the materials recovered from the KDS layers dated at 65.5 ± 4.8 ka to 59.4 ± 4.6 ka by single-grain optically stimulated luminescence (OSL) (Fig. 4). The lithics are typical of those attributed to the Howiesons Poort Industry (HP) in southern Africa. The research emanating from this site has the potential of contributing to current debates about the origins of modern human behaviour with a specific focus on the *Homo sapiens* that inhabited the southern Cape during the MSA. Excavations at KDS and at other sites within the complex will continue in the future.

In KDC archaeological deposits are concentrated behind the dripline and extend over 280 m² at a c. 25° slope. A c. 15 m talus slopes seawards at 31.5°. In KDS visible surface deposits extend c. 7 m² at a slope of c. 29° behind the dripline. The deposits are severely truncated and the talus lies at 38.5°. It is probable that the natural and archaeological deposits in the cave complex, especially those in KDS, were truncated by mid-Holocene +2–3 m sea levels (Bateman et al., 2004; Compton, 2001). A quartzite cobble beach lies directly below the complex with an extended rocky shoreline and few sandy beaches. Initial excavations in KDC in 2010 yielded Terminal Pleistocene deposits (Albany Industry) radiocarbon dated at c. 14–10 ka (report in prep.). In 2013 several tons of rockfall were removed in the area of the dripline in Klipdrift Cave (Fig. 3). A limited test excavation in the Klipdrift Cave Lower (KDCL) site revealed MSA deposits underlying the overburden. A provisional minimum OSL age of c. 70 ka was obtained for the base of the overburden. Further excavations of KDCL are planned.



Topographical features of Klipdrift Complex including layout of excavated Klipdrift Cave, Klipdrift Cave Lower and Klipdrift Shelter.

<p><i>Secrets of De Hoop and Environs</i></p>	<p>Field notes on the GEOMORPHOLOGY, HYDROLOGY and ARCHAEOLOGY Between CAPE AGULHAS and CAPE INFANTA</p>	 <p>Geomorphological Research</p>
---	--	---

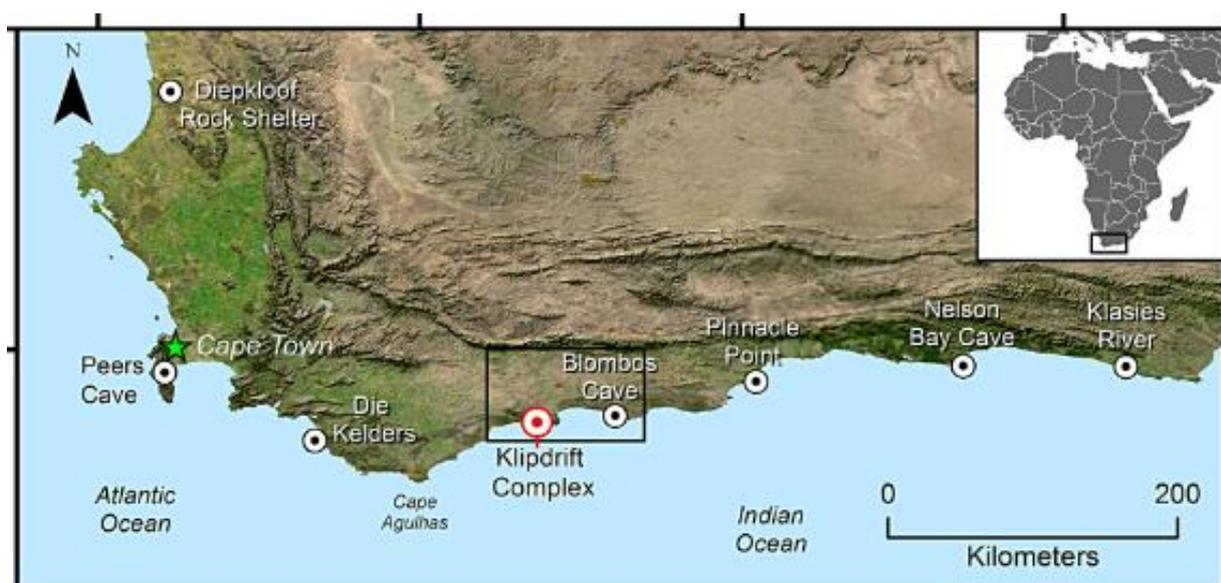
Conclusion

KDS is a newly discovered coastal site in the southern Cape containing lithics typical of the HP. It is the first known typical HP site (see Henshilwood, 2012) located on the c. 600 km of coastline between Nelson Bay Cave, Plettenberg Bay and Peers Cave (Skildergat) on the Cape Peninsula (Fig. 1). No anthropogenic deposits were recovered at KDS that predate 65.5 ± 4.8 suggesting that the c. 71 ka early HP-like technology reported at Pinnacle Point (Brown et al., 2012) and the >c. 72 ka Still Bay phases from nearby Blombos Cave (Henshilwood, 2012) are technocomplexes that predate the KDS HP deposits. Nevertheless, the KDS assemblage provides a useful corollary with the earlier Blombos and Pinnacle Point data on coastal subsistence patterns during the MSA in this region. Future excavations at the adjacent KDCL site with MSA deposits that predate c. 70 ka, and of the post-HP layers (for which a single age of 51.7 ± 3.3 ka is currently available) at KDS, will add to this knowledge. The apparent absence of shellfish at this site is worth noting.

The current faunal sample from KDS is too small for definitive statements regarding environmental conditions during the HP in this region, although tentatively, the macromammal and shellfish data point to some changes in rainfall regimes and local environments within the sequence. Additional data from microfauna, isotopic analysis and larger macrofaunal samples will contribute to refining these observations and to the greater picture of environmental conditions during this period. It is worth noting that the environmental change that is evident in layer PBC apparently corresponds to a change in lithic raw materials, from a predominant exploitation of silcrete to an increased importance of quartz exploitation and also a marked decrease in pigment exploitation. Future research on the KDS HP will focus on understanding the role played by environmental changes in the evolution of raw material and food procurement strategies by MSA hunter-gatherers. The development of an open landscape might have influenced general mobility strategies, affecting both hunted species and access to raw materials.

Whether the engraved OES from KDS indicates continuity in the practice of marking or decoration of material culture in the southern Cape, as is evidenced at Blombos (Henshilwood et al., 2009) in the Still Bay and pre-Still Bay layers, is not clear at this stage. This is especially so as there is an anthropogenically sterile sand layer above the terminal MSA deposits at Blombos and below the first MSA deposits at KDS. However, the planned detailed studies of the KDS engraved OES may provide further evidence on likely cultural links with other Western Cape sites.

The recent discovery and excavation of KDS helps reinforce the notion that *H. sapiens* using HP technology were fairly widely spread in South Africa between 66 and 59 ka, were able to adapt to a range of environmental conditions and yet produced a technology that is fairly standardized. The latter suggests a deliberate continuity in material culture styles probably reinforced by frequent contact among and between the groups that ranged across this region. Some of the cultural traditions, such as the engraving of OES, appear infrequently, but their presence in sites on the west coast and now the southern Cape reinforces this notion of contact within a far reaching social network.



The Klipdrift Complex location in the context of other archaeological sites in the area.

Read more about Stone Age archaeology in Chapter U.