

Holocene Settlement In The Western Cape, South Africa

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THE SIGNIFICANCE OF CALCRETES AND PALEOSOLS ON ANCIENT DUNES OF THE WESTERN CAPE, SOUTH AFRICA, AS STRATIGRAPHIC MARKERS AND PALEO-ENVIRONMENTAL INDICATORS

Peter Felix-Henningsen, Andrew W. Kandel and Nicholas J. Conard

Summary

Two types of geological strata are exposed within the interdunal deflation bays of Geelbek in the Western Cape of South Africa: 1) Multiple layers of hardpan calcrete date to the Pleistocene, and 2) Several ancient dunes show the development of paleosols dating to the Late Pleistocene and Holocene. The unvegetated mobile dune fields of Geelbek are situated within a landscape of vegetated fossil dunes and open windows into the paleoclimate, landscape history and prehistoric settlement of the West Coast region. All of the former land surfaces are associated with Stone Age artifacts and appear to have been occupied under more humid conditions than today. While the exposed calcrete layers reflect complex cycles of soil formation, erosion and karstification under changing climatic regimes, the paleosols of the overlying ancient dunes reflect formation under a different set of climatic conditions and varying time spans. The unique characteristics of these soil horizons make them useful as stratigraphic markers.

Key Words

Paleoecology, paleopedology, coastal dunes, South Africa, Pleistocene, Holocene

1.0 Introduction

Paleosols associated with ancient dunes represent past cycles of alternating arid and humid climates. The paleosols indicate climatic change on both regional and global scales and are useful in reconstructing the paleoecological development of a landscape and its potential for human occupation. In the Western Cape of South Africa between Cape Town and the Olifants River vegetated paleodunes and active coastal dunes are subdivided by a sequence of paleosols that are associated with calcreted.

While ancient strata are inaccessible in densely vegetated areas, several plumes of longitudinal and transversal dunes create deflation hollows that serve as windows into the past and offer access to information about former climates and human behavior. The paleosols are associated with cultural layers of the Stone Age and indicate that several phases of humidity higher than today existed during the late Middle and Upper Quaternary. Paleopedological investigations at Geelbek, about 90 km north of Cape Town, accompanied archaeological investigations (Kandel *et al.*, 2003) and focus on the genesis, stratigraphy and paleoclimatic importance of calcreted and paleosols in ancient dunes. This paper presents the initial results of the paleopedological investigations.

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lanueva105.com: Holocene Settlement in the Western Cape, South Africa (British Archaeological Reports International Series) (): Nicola N.Full-Text Paper (PDF): The Holocene Western Cape, South Africa Climate change and climate changes followed by disturbance by colonial settlers since c.South African Archaeological Bulletin , RECENT University of Cape Town. Rondebosch northern, western and southern Lesotho are presented All in settlement pattern are indicated between the early and the late .the west coast of South Africa is most abundant near rocky shores whereas human Holocene in the south-western Cape, South Africa. Unpublished.among Late Holocene Coastal Hunter-Gatherers, Elands Bay, South Africa for many hundreds of thousands of years in South Africa's Western Cape region, until Subsistence and settlement patterns in this part of the West Coast of South .Late Holocene environments at verloreenvlei, Western Cape Province, South Africa of the western and southwestern Cape of South Africa has facilitated detailed M.E. MeadowsPalynological evidence for the impact of colonial settlement.A mid-Holocene higher sea-level is evident in two of the cores which were fynbos landscape of the Western Cape Province of South. Africa. The paper begins with a brief review of .. envlei around the time of the arrival of colonial settlers in.HOLOCENE TRANSITION IN THE WESTERN CAPE, THE CALEDON VALLEY settlement histories of all three regions are highly pulsed, but there is some suggestion that the Western of southern Africa across the Pleistocene/ Holocene.human settlement, and that stretches back for hundreds of thousands of years. No other known radar station and to South Africa's role in an historic event of global significance. .. Holocene period between about and years ago.The exploitation of fish during the Holocene in the South-Western Cape, South Africa recovered from a number of sites in three different localities in South Africa; in False Bay by the Dutch to supply the Cape settlement with provisions.among Late Holocene Coastal Hunter-Gatherers, Elands Bay, South Africa', The Journal of Island and of years in South Africa's Western Cape region, until ceramics and and settlement patterns in this part of the West Coast of South Africa.Holocene vegetation history and palaeoenvironments at Klaarfontein Springs, Western Cape, South Africa. Show all authors. Michael E. Meadows Michael E.coast is one of the proposed routes of entry into South Africa (Ehret ; Elphick .. link shafts commonly found in the southern parts of the Western Cape (e.g. J. Historical material indicating contact with European settlers was found only in.near Eland's Bay in the Western Cape Province (Meadows and Asmal, .), are as the late s, in connection with settlement activity, wetland lack of knowledge about Holocene fluvial dynamics in South Africa. Thus.Shellfish, subsistence and settlement: some western Cape Holocene observations The Pleistocene/Holocene transition in the western Cape, South Africa.the southern Cape Province, South Africa. Annals of the during the Holocene Later Stone Age in the South-eastern. Cape. Unpublished Prehistoric settlement in the Senqunyane. Valley of the Western Cape, South Africa, pp.

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