

THE WESTERN SAHARA PROJECT ARCHAEOLOGICAL SURVEY

FREE ZONE: SOUTHERN SECTOR, 6 – 19 MARCH 2005

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This report summarises the findings of a short archaeological reconnaissance survey in the Southern Sector of the Free Zone of the SADR, following a similar survey in the Northern Sector in September-October 2002. The 2002 survey was funded by a British Academy Small Research Grant awarded to Nick Brooks; the 2005 survey was funded by the participants (Dr Nick Brooks, Dr Mark Milburn, Dr Stefan Kröpelin,** and Erica Bruder). The results of the 2002 survey (also mentioned in this report where appropriate) have been published in the journal *Sahara*¹ and also on the project web site²; other publications are in preparation.³ Since the March 2005 survey, some funds have been acquired for further archaeological work, and further funds will be sought to support the continuation of the project. Subject to agreement with the Ministry of Culture, future work will involve further reconnaissance survey, detailed recording of specific sites, and excavation of prehistoric burials. The ultimate aim of the project is to establish linked chronologies of environmental and cultural change in the Western Sahara, and to understand how past changes in patterns of human settlement and activity are related to changes in climate and also to developments in the wider Saharan region.

Archaeological sites are extremely abundant in the Free Zone. Most of these sites are well known to the Sahrawi, and some have been documented by other archaeological teams, most notably from the University of Gerona.⁴ The most well known sites are those at Erqueiz, Sluguilla and Uadi Kenta, comprising extensive collections of paintings and engravings. Less attention has been paid to the abundant and diverse burial sites and related monuments, and to materials such as worked stone tools and ceramics. The March 2005 survey focused on such sites in the localities of Zug, Dugej, Lektaytayra, the Dukhen Hills, Lajuad, and Azaig Bedrag. Important sites at Bou Dheir and Tifariti, recorded during the 2002 survey, were also revisited.

Rock art

Rock paintings and engravings are abundant in the free zone, and depict a variety of wild animals that are also represented in rock art in the central and Eastern Sahara. Many of these animals require much wetter conditions than exist today, indicating that Western Sahara experienced similar climatic variations to the wider Saharan region in the past. Human figures and cattle are also widely represented, as throughout the Sahara. It is likely that cattle were introduced from the central or eastern Sahara, given our current state of knowledge about cattle domestication in Africa. Despite this common Saharan heritage, the rock art of Western Sahara exhibits many unusual features. The rock painting site identified in 2002 at Bou Dheir, while representing typical "Saharan" subject matter, might even be said to be unique in terms of style when compared with the known body of Saharan rock art. Rock engravings recorded in 2005 in the Southern Sector are particularly unusual in a Saharan context, consisting of abstract patterns including spiral designs and concentric circles more reminiscent of some European rock art (although we do not infer any cultural connections with Europe on this basis). These engravings are particularly abundant in the region of Zug. Two rock art sites were recorded at Lajuad; one of these, a cave containing numerous engravings of humans and animals, is already known. This site is remarkable for the unusual realistic carvings of pairs of human feet. A second cave at Lajuad appears to be a new site; this site is of particular interest as it is the only site recorded to date in the Free Zone at which Tifinagh-style script is present;

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Tifinagh-style script is common in the central Sahara and the Canary Islands. While it is difficult to date rock art with any precision, we may conclude that all the major “periods” of Saharan rock art are represented in the Free Zone. In other Saharan regions such representations are thought to span the period from some 8-10 thousand years ago to late prehistoric or early historical times.

Funerary monuments

Many different styles of funerary monument were recorded during the 2002 and 2005 surveys. The most common types of burial monuments are tumulus and platform burials, which are common throughout the Sahara. Crescent-shaped burial monuments (also common in Mauritania) are also extremely abundant in the Southern Sector, although only one such burial was recorded in the Northern Sector, at Bou Dheir. Most of these monuments face east to southeast, with a large number oriented in the direction 110°, suggesting an astronomical aspect to prehistoric rituals and beliefs associated with death. A single V-shaped monument, a style common in central Saharan regions such as the Libyan Fezzan, was identified in 2002 in the region of Bir Lahmar. Throughout the Sahara these monuments typically have a similar orientation to that of the crescent monuments recorded in the Southern Sector. Complex monuments comprising tumuli, enclosures and linear stone arrangements were identified 14 km north of Tifariti. A very unusual, elaborate and well defined funerary complex was recorded at Lajuad, consisting of an enclosure within which are located a number of burials of different type. Throughout the Free Zone, burial monuments tend to be found in groups, which often contain monuments of more than one type. In addition to Tifariti and Lajuad, notable groups of burials were recorded at Zug and in the Dukhen Hills, and in 2002 in the vicinity of Wadi Erni.

Further evidence of prehistoric astronomy takes the form of groups of standing stones and circular stone arrangements in which certain features define particular alignments, for example north-south, east-west, and southeast-northwest. Such circular arrangements were recorded in association with burials in the region of the Dukhen Hills. The most striking collection of standing stones is located 14 km north of Tifariti, and consists of some 65 stones including lines of stones oriented north and east. In this general area individual and multiple standing stones are also associated with tumulus burials, and the complex burials mentioned above are also associated with specific orientations. Individual standing stones or *menhirs* were recorded in the Southern Sector, with two such menhirs, some 2 m in height, located in the vicinity of Azaig Bedrag. The stone arrangements are reminiscent of those of Western Europe; in Africa the closest resemblance is probably with the stone circles of West Africa and the important site of Nabta Playa in Egypt, although we will not know the ages of the monuments in Western Sahara until and unless excavations yield datable materials.

Ceramics and stone tools

In 2002 very few ceramic remains were recorded in the Northern Sector. However, pottery fragments are extremely abundant in the Southern Sector, associated with burial monuments, rock shelters, and features such as hills that may have acted as meeting places or ritual sites for prehistoric groups. The ceramic finds included the so-called dotted wavy line pottery typical of the Sahara and originating in the Eastern Sahara, demonstrating a cultural connection with the greater Saharan region. Other types of decorated and undecorated pottery were also recorded; decorated pottery is generally earlier than undecorated pottery, indicating a long occupation of the region by prehistoric groups.

Few stone tools were recorded in either 2002 or 2005, with the exception of grinding stones which are common in the Southern Sector. Spanish publications from the colonial era describe a wide array of stone tools and it is possible that the current lack of such materials is the result of earlier collection by archaeologists and souvenir hunters, at least in some locations. Nonetheless, worked stone tools were recorded, some of which indicate occupation of the region some hundreds of thousands of years ago by groups that predated modern humans (i.e. *Homo erectus*). Arrowheads were recorded in the Northern Sector in 2002, and many arrowheads are on sale in Smaara Camp, indicating that these artefacts are relatively common.

Threats to archaeological sites

Most of the sites described above, particularly those in the south, are rarely visited by outsiders, and therefore have been subject to little disturbance. Some burials have been opened, but compared to most of the rest of the Sahara the funerary monuments are in generally very good condition. The biggest threat is to the rock art, some of which has been extensively damaged. At Erqueiz many paintings have been badly damaged or completely destroyed by the practice of wetting the rock surface, a common and highly destructive method of highlighting colours for photography. The painted rock surfaces at Erqueiz are generally extremely fragile and have been affected by natural weathering; touching of the rock surfaces by visitors accelerates the process of destruction. It is recommended either that the rock art sites at Erqueiz are closed to visitors, or that visits are closely managed, with visitors being strictly prohibited from wetting or touching the painted surfaces.

The engravings at Sluguilla are less susceptible to erosion, but are well known and easily accessible. Small marker cairns have been constructed next to individual engraved panels so that they may be found easily on the rocky surface. During a brief visit to the site in 2005, it was observed that a number of these cairns were associated with disturbed areas that retained the impressions of boulders, which have obviously been removed. The relatively small size of many of the engraved boulders makes them vulnerable to removal, presumably for sale on the international market or for private collections. The engravings at Sluguilla might be protected by a permanent staff of “guardians”; if this is not practical the site should be systematically surveyed, with the location and details of each engraved boulder recorded, so that instances of looting may be identified. Such a record, which may already be available as a result of the work of the University of Gerona, would mean that there may be possibility of retrieving illegally removed engravings should they appear in future on the international market.

The rock paintings at Bou Dheir have been affected by natural weathering, and there is evidence of an ancient rock fall, but they are in good condition and appear to have been protected from recent disturbance by their remote location. This is a unique and important site, and it is recommended that foreign visitors be kept away from the site in order to avoid the fate of the paintings at Erqueiz.

Summary and future prospects

The Free Zone of the SADR is extremely rich in archaeological sites, and there is potential for many years of fruitful archaeological research, which will increase our understanding of past environmental and cultural change in the Sahara. This research will also provide more general lessons about links between environmental and socio-cultural change, lessons that are relevant to current concerns about climate change. The two reconnaissance surveys in 2002 and 2005 have already demonstrated that prehistoric Western Sahara was part of the wider Saharan cultural complex, and there is evidence for the transmission of cultural traits from east to west in the form of burial monuments, pottery, and cattle herding. Given the current relative abundance of vegetation compared with similar latitudes to the east, it is possible that Western Sahara served as a refuge for populations fleeing advancing aridity as the Sahara dried up around 4000 – 5000 years ago. However, despite the evidence of contact with other Saharan regions, there are many distinctive “indigenous” elements in the archaeological record, suggesting a significant period of occupation and cultural innovation.

Future work will continue with reconnaissance and recording of sites, but will also involve detailed survey work at particular locations, undertaken in conjunction with excavations. All work will be subject to approval by the Ministry of Culture, and sites for excavation will be identified in cooperation with the Ministry. A priority for future research will be the development of chronologies of environmental and cultural change based on radiometric dating of plant, animal and human remains. A further priority will be to address the preservation of the rock art sites. Initial approaches to UNESCO have been unsuccessful, due to the political situation in Western Sahara. However, the Project will pursue contacts with UNESCO, and also approach the Trust for African Rock Art (TARA). TARA may be able to provide funds for photographic surveys and assist in raising the profile of the preservation issue, which may in turn be of help in persuading bodies such as UNESCO to consider the status of the archaeological sites. In addition, the Project will monitor the condition of the sites and cooperate with the Ministry of Culture in developing strategies to assist in their preservation, and provide archaeological training in the field to one or more Sahrawi individuals if suitable candidates can be identified by the Ministry. In the event of a favourable

political solution to the conflict with Morocco, archaeology could form the basis for specialised, low-impact tourism, bringing economic benefit to the Sahrawi people. With this in mind, the Project will support the preservation of this important heritage and the development of specialist knowledge of the archaeology among the Sahrawi population.

A major element of the Project is publication, and the results of the work will be published in a number of international journals. Copies of all publications will be provided to the Office of the President and the Ministry of Culture. Results will also be presented at international conferences and in the popular print and broadcast media. Contacts with print and television journalists will be pursued, and the possibility of bringing journalists and film crews to Western Sahara will be explored as fully as possible. The project will remain committed not only to recording the archaeology, but also to raising the international profile of the Western Sahara and its situation.

Past experience demonstrates that it is difficult to acquire funding for extensive seasons of fieldwork, partly due to the political situation in Western Sahara. Therefore, an alternative model of funding is proposed in which paying volunteers contribute some or all of the costs of fieldwork; field teams would consist of 4 – 6 professional archaeologists who would carry out excavation and detailed survey, and 4 – 6 volunteers who would assist with survey, reconnaissance and recording work. This method of funding is increasingly common in archaeological fieldwork, and has proved successful in supporting projects lacking in conventional funding sources. All the proceeds from the volunteers would be used to cover the costs of fieldwork, radiometric dating and publishing and dissemination of the results, and no financial profit would be involved for any party. Such an approach would be subject to the approval of the Ministry of Culture, and funds will still be sought from conventional sources.

Future work will be directed by Dr Nick Brooks, with excavations directed by Dr Joanne Clarke, both currently at the University of East Anglia, UK. In the short term, Professor Savino Di Lernia of the University of Rome “La Sapienza” and Dr Stefan Kröpelin of the University of Köln will provide input to the project but will not participate in field work due to other commitments; this situation will be reviewed in 2006. Significant participation in fieldwork by the University of Köln is anticipated in 2007, subject to confirmation. Cooperation will also be sought with other teams working in the region, most notably that from the University of Gerona, with whom contact has already been established and future work discussed.

We would like to thank the Polisario and the Sahrawi people for supporting us in our work and for making us welcome in the SADR. In particular we extend our thanks to the Minister of Culture for encouraging this work, and to Bachir Mehdi Bhaua and our other Sahrawi field crew for working tirelessly to ensure that our work was achieved successfully. The 2005 field season was made possible by Dr Mark Milburn, who generously provided the majority of the funding.

¹ Brooks, N., Di Lernia, S., Drake, N., Raffin, M. and Savage, T. 2003. The geoarchaeology of Western Sahara: Preliminary results of the first Anglo-Italian expedition in the “free zone”. *Sahara* 14: 63-80.

² www.cru.uea.ac.uk/~e118/wshara.html

³ Brooks, N. Cultural heritage and conflict: the threatened archaeology of Western Sahara. *Journal of North African Studies* (forthcoming).

⁴ Soler, N., Serra, C., Escola, J. and Unge, J. 1999. *Sahara Occidental: Pasado y de un pueblo*, Universitat de Girona.