

The 2018 Archaeological Survey  
at Tawi Said, Sultanate of Oman

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# The 2018 Archaeological Survey at Tawi Said, Sultanate of Oman

by Stephanie Döpfer, Irini Biezeveld,  
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Cover illustration: Sherd of a Wadi Suq pottery vessel found at Tawi Said.

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# 1 Introduction (Stephanie Döpfer)

## 1.1 Location

Tawi Said is situated at the eastern fringe of the Wadi Batha, directly opposite the northern limits of the Sharqiyah (Wahiba) desert, approximately 5 km to the northwest of the modern city Badiyah/Al-Mintarib and 2.5 km southeast of Al-Wasil (WSG 84 UTM zone 40N, 681779 E, 2485846 N, Fig. 1). Thus, it lies at the margin of the open drought-deciduous xeromorphic woodlands of northern Oman and the sandy desert.<sup>1</sup> The woodland is characterised by trees such as *Acacia tortilis*, *Ziziphus spina-christi*, *Prosopis cineraria* and *Maerua crassifolia* and the presence of annuals and grasses that emerge after rainfall. In the Sharqiyah Sands, longitudinal dune ridges of aeolian orange-red sand up to 100 m in height separated by interdune valleys with gravel characterise the landscape. Woodlands are absent here, with the exception of a few stands of *Prosopis cineraria* and the flora is generally dominated by Saharo-Arabian species.

The region of Tawi Said has received on average 81 mm of rainfall over the last ten years with a maximum annual rainfall of 139 mm in 2013 and a minimum rainfall of only 1 mm in 2018, demonstrating the large range of interannual variability.<sup>2</sup> The name *tawī* indicates that it is a place where a natural depression facilitated the construction of a large well.<sup>3</sup> Such depressions were frequently visited by camel herding Bedouins.<sup>4</sup> Other than small domestic wells (*bi'r*), large wells were meant to produce large and continuous amounts of water and were therefore animal powered (*zajara*). Al-Mintarib in the vicinity of Tawi Said is one in a chain of marketplaces from the coast to the interior along the southern edge of the Hajar Mountains, where villagers sell agricultural produce, dates, fruit, vegetables and cloth, and Bedouin groups traded with products of animal husbandry, salt, firewood, charcoal, rugs and bags as well as dried fish.<sup>5</sup>

This adds another point of interest to the location of Tawi Said.

The area of archaeological significance in Tawi Said sits directly north to the slopes of the Wadi Batha, in an area of low sand dunes, grasses and scrub (Fig. 2). Wind erosion formed the hard surface with small to fist-sized stones, removing the lighter particles such as sand. This has led to a concentration of heavy particles like stones but also archaeological finds on the surface. This process is typical for arid areas such as central Oman. In the northeast and southwest, this area is bordered by modern car tracks, while in the north, it becomes sandier. To the east, the area runs into two shallow sand dunes of ochre-coloured sand with small to fist-sized stones on the surface (Fig. 3), and to the west into another cluster of smaller sand dunes, which are overgrown with trees and shrubs. To the south it ends at the edge of the wadi (Fig. 4 and Fig. 5). The wadi has dug itself several metres deep into the landscape (Fig. 6). Its bed is characterised by very fine sand that is black on the surface and ochre-coloured underneath.

## 1.2 Research history

Beatrice de Cardi discovered Tawi Said in 1976 when she was looking for the third millennium BCE remains of Tawi Hulays,<sup>6</sup> returning in 1978 for a short field season, including intensive survey and excavations. The survey revealed much Early, Middle and Late Islamic pottery as well as at least three concentrations of Wadi Suq period sherds.<sup>7</sup> Other finds from the survey included soft-stone vessel fragments and worked flints. The Royal Oman Police assisted de Cardi by flying over the area so that she could get an impression from the air. This revealed outlines of two mud-brick platforms connected to each other by two parallel walls (Fig. 9). The walls were about 1 m thick and 2.5 m apart from each other. They were extremely weathered and only preserved 2–3 cm above

1 Patzelt 2015: 291–293.

2 <https://www.worldweatheronline.com/ibra-weather-averages/ash-sharqiyah/om.aspx>.

3 Scholz 1977: 101; Costa 1991: 245.

4 Thesiger 1950: 151.

5 Scholz 1977: 112 Abb. 3; Wilkinson 1987: 37.

6 De Cardi 1977: 61.

7 De Cardi – Bell – Starling 1979: 85.



**Fig. 1: Location of Tawi Said in central Oman.**



**Fig. 2: Grasses and scrub at Tawi Said.**



**Fig. 3: Low sand dune at Tawi Said.**

surface, from which they differed by their lighter colour and denser consistence (Fig. 7). No pottery was found in direct association with this structure, but some Wadi Suq period material was found to its northwest. None of de Cardi's walls were rediscovered during the 2018 survey, but patches of light-coloured soil were present that might have been mistaken for walls (Fig. 8). Alternatively, de Cardi's walls were simply no longer preserved.

De Cardi excavated five small trenches (Fig. 9), whose exact location could not be reconstructed during our work in 2018. Trench TSD1, measuring 2 x 5 m, was laid out covering part of the two mud-brick walls and the western

part of the mud-brick platforms.<sup>8</sup> It was excavated to a depth of 30 cm and featured only sterile sand. The second trench, TSD2, lies about 8 m east of TSD1 in the vicinity of a pottery scatter and measures 1 x 2 m. It was excavated to a depth of 40 cm and again yielded only sterile sand. Trenches TSD3 and TSD5 are located about 40 m northwest and 30 m northeast of TSD2, again in areas of pottery concentrations.<sup>9</sup> Within these, no evidence for human occupation was encountered. Trench TSD4

<sup>8</sup> De Cardi – Bell – Starling 1979: 86.

<sup>9</sup> De Cardi – Bell – Starling 1979: 86.



Fig. 4: Tawi Said with Wadi Batha and the sand dunes of the Sharqiyah Sands in the background.



Fig. 5: Aerial view of Tawi Said with Wadi Batha and the sand dunes of the Sharqiyah Sands on the right and the oasis of Al-Mintarib in the background.

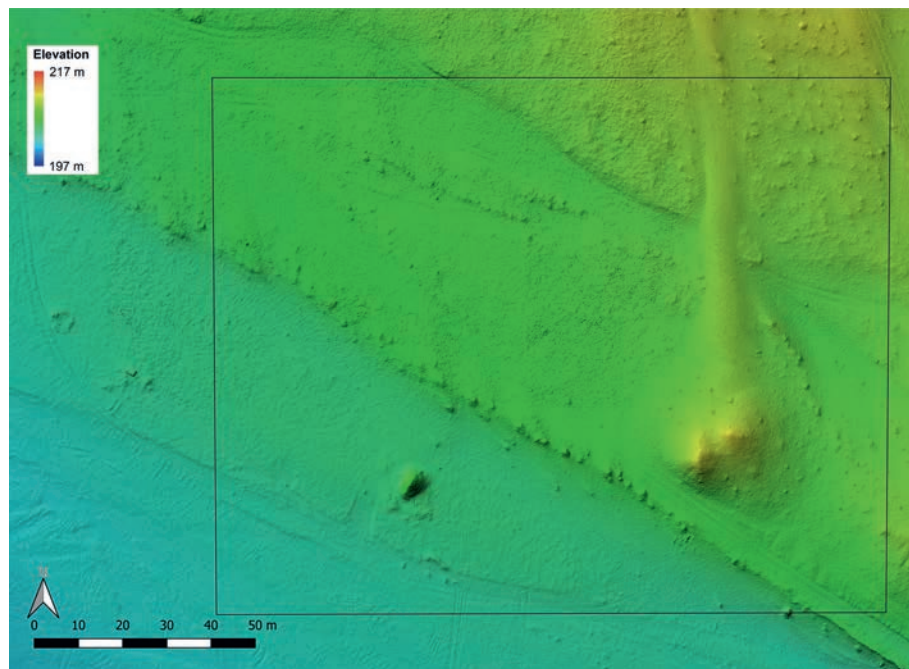


Fig. 6: DSM of Tawi Said.



Fig. 7: Mud-brick walls from de Cardi's excavations in 1978 (de Cardi – Bell – Starling 1979: pl. 36).



Fig. 8: Patches of light-coloured soil.

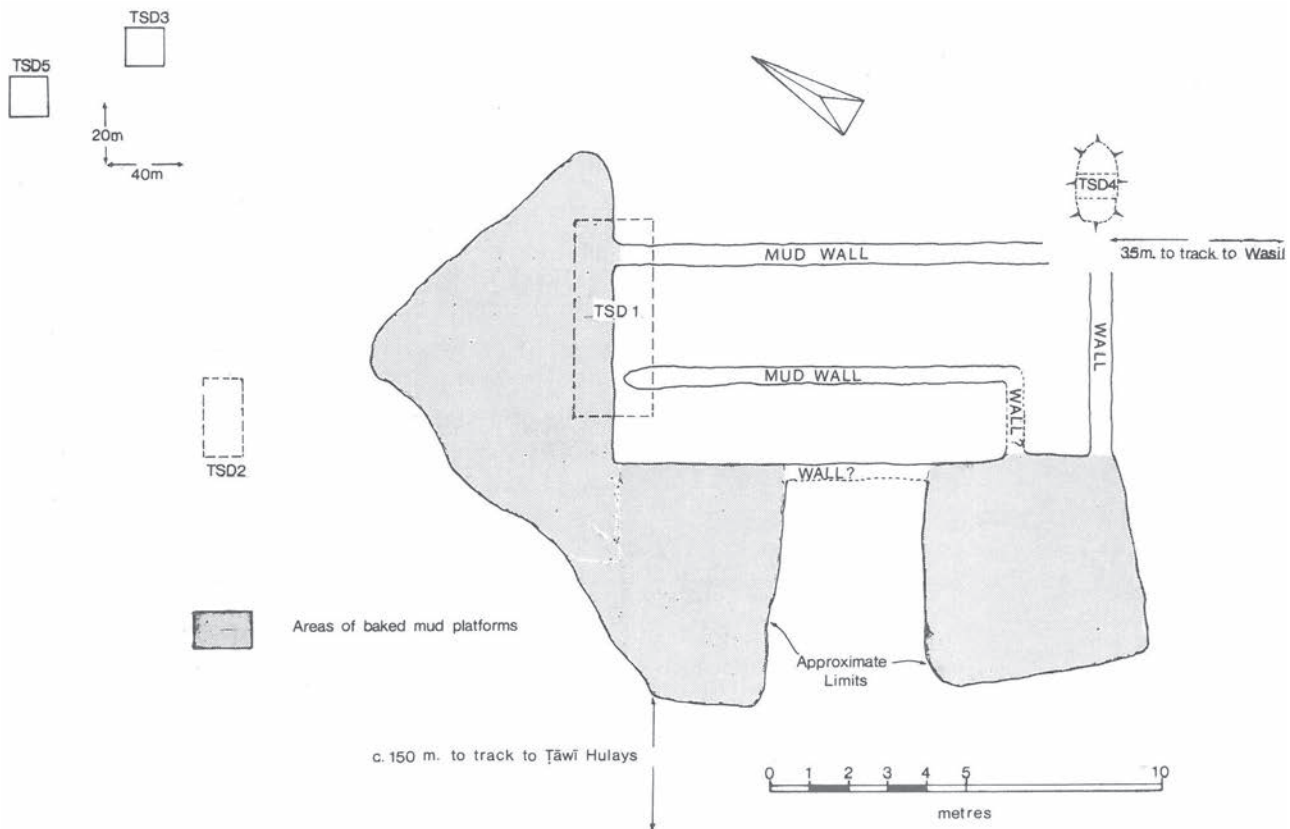


Fig. 9: De Cardi's plan of the mud-brick structures (de Cardi – Bell – Starling 1979: 85 fig. 10).

corresponds to a shallow mound standing 10 cm above ground level at the northeastern end of the mud-brick structure. Within this 1 x 2 m large area, burnt stones were identified on the natural sand forming a hearth.<sup>10</sup> It also yielded seven Early/Middle Islamic pottery sherds. As her trenches “failed to reveal any depth of occupation” de Cardi stopped her work at the site.<sup>11</sup> Nevertheless, ever since then, Tawi Said has featured prominently in the literature as the first discovered and so far only Wadi Suq period settlement site in the interior of Oman.<sup>12</sup>

### 1.3 The 2018 survey

In November 2018, a team from the Goethe University Frankfurt returned to the site to gain insights into the nature of the site, its chronological range and the activities that can be identified for the different periods. This included the question of where the occupation of Tawi Said can be dated to within the Wadi Suq and Islamic periods. The field season lasted from 10 November to 3 December 2018, whereby the first seven days were spent at the site and during the other two weeks the finds were

processed. The five participants of the survey included Dr Stephanie Döpfer, Dr Conrad Schmidt, Nick Kirchhoff, Jonas Kluge and Samantha Petrella. Financial support for the fieldwork was provided by the *Deutsche Orientgesellschaft*.

The survey area was systematically field walked in straight north–south lines. Each person was spaced at 1.5 m distance to ensure complete visual coverage of the surface.<sup>13</sup> In total, an area of 150 x 125 m was examined this way (Fig. 10). Each object found during the survey was given an ascending number, measured with a portable GPS device (Garmin eTrex 10), and collected for further processing. In total, 8,611 artefacts were registered during the Tawi Said survey, including 6,750 pottery sherds, 544 seashell fragments, 336 lithic artefacts, 225 metal objects including slag and copper prills, 48 pieces of personal adornment and two stamp seals.

Finds were scattered over the entire survey area in large quantities except for the wadi and the low sand dune in its east. Here, only isolated pottery sherds were encountered. Towards the east the finds generally thin out slowly, while the find quantities continue in a similar pattern to the north and west outside the survey area, demonstrating that the archaeological site is much larger

10 De Cardi – Bell – Starling 1979: 86.

11 De Cardi – Bell – Starling 1979: 61.

12 Carter 1997: 56–67.

13 Cherry *et al.* 1991: 20.



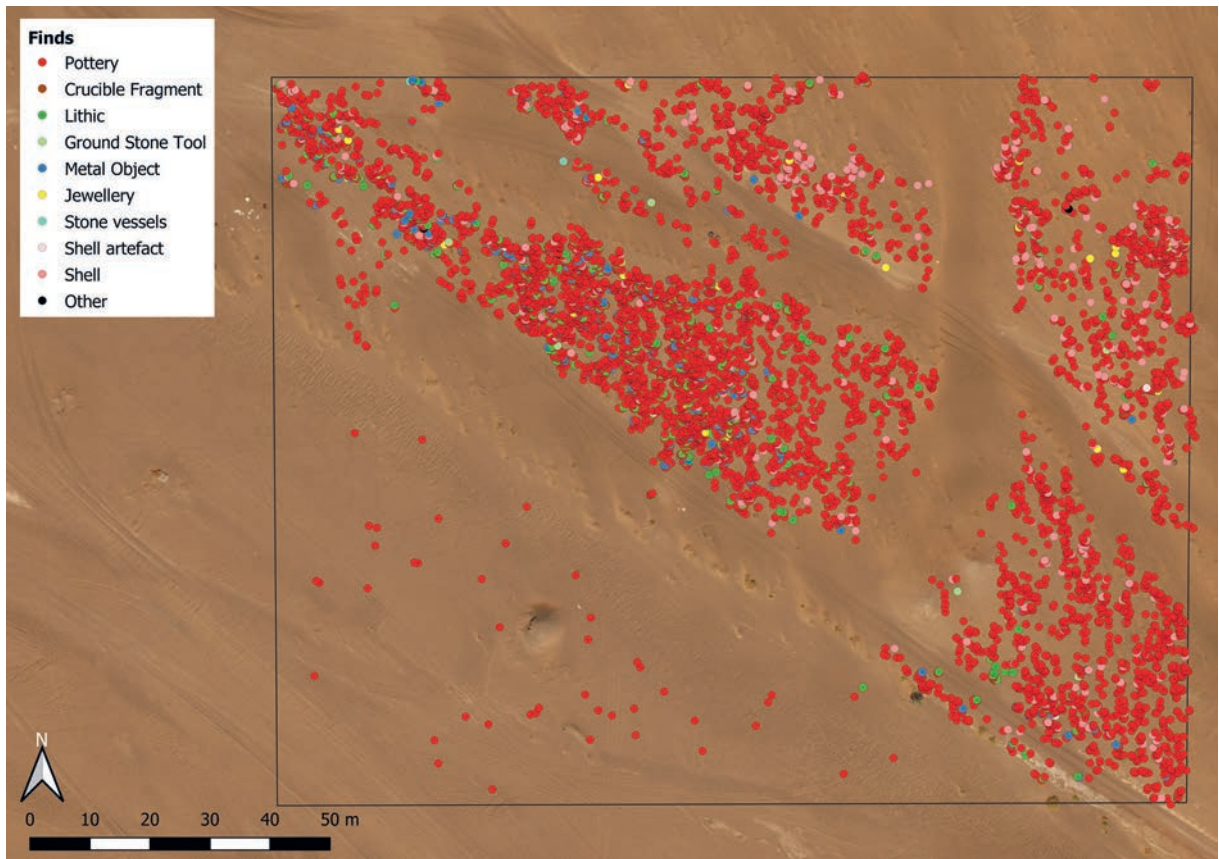


Fig. 10: Survey area in Tawi Said with distribution of finds.

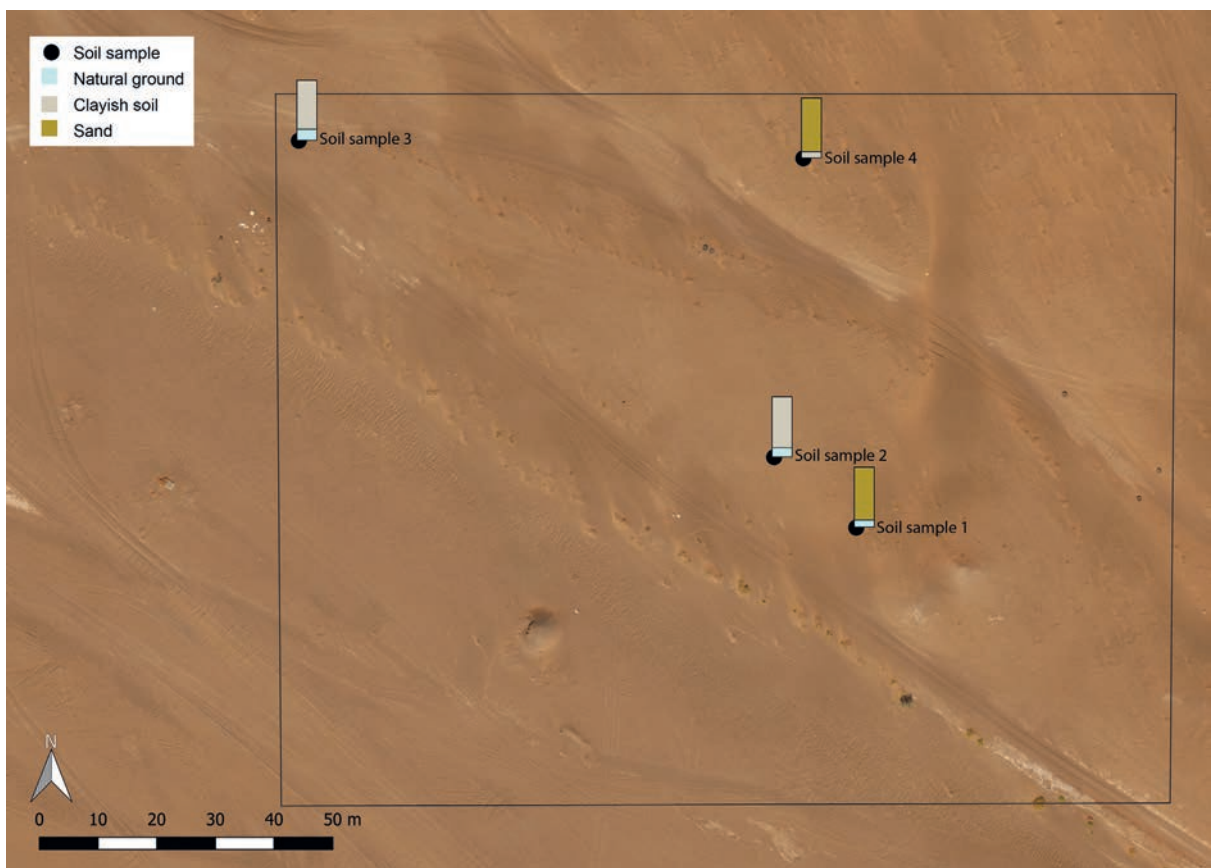


Fig. 11: Soil sample locations at Tawi Said.

than the surveyed area. The densest concentration of finds is directly west of the sand dune in the centre of the survey area. The small, very intensive find concentration in the northeast can be explained by the fact that here a whole vessel was found broken into numerous fragments, whereby each fragment received its own number and was evaluated individually in the distribution of finds.

Additionally, four soil samples were conducted in the survey area with a hand-powered earth auger to get an impression of the depth of accumulation (Fig. 11). Soil sample 1 on the sand dune in the southeastern part of the survey area displayed 74 cm of fine, soft sand before reaching a more compact, light beige coloured material with nearly no inclusions. In soil sample 2, situated approximately 18 m to the northwest of drilling 1, no

sand was present. Instead, the upper 57 cm were made of the same compact, light beige coloured material as found in drilling 1. Below, the natural soil was reached. This is whitish in colour, rough and hard. Soil sample 3 was conducted at the northwestern corner of the survey area. The sequence of material is similar to soil sample 2. In the upper 44 cm, the light beige coloured material was found. Below, there is natural soil. In soil sample 4 in the northern part of the survey area, the upper 89 cm comprises fine sand. This is followed, as in soil sample 1, by the light beige coloured material. Thus, in those parts of the survey area that are not covered by sand dunes, natural soil was reached after 57 to 75 cm, giving a promising depth for potential anthropogenic layers at the site.