



D. DURICRUSTS

Field Note D4a3. Pedogenic silcretes – C. Hill cap habits



Hilltop silcrete.



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Overview

This Field Note describes the morphological characteristics of pedogenic silcrete hill caps in the Study Area. Silcretes on hilltops display a wide range of habits. The author adopted names from the literature and gave names to habits which have no reference in the literature.

Cap rim habits are those, which can be identified when climbing to and approaching a hill cap. The cap habits are (not in any particular order): Irregular (shapeless), Bulky, columns, Cones, Lenses, Plates, Slabs, Boulders (of various shapes), Bulbs, Pillows, Cushions, Nodules, Blocks, Stacks, Serrations and Overhangs. The cap surface habits can only be identified when one gets onto the surface of the cap.

Cap edges (rim) habits

Irregular (shapeless) habits (Figures 1 and 2)



Figure 1. Top and bottom: irregular (shapeless) hilltop silcrete.



Figure 2. Top and bottom: irregular (shapeless) hilltop silcrete.



Bulky habits (a) - shapeless chunks (Figure 3)



Figure 3. Top and bottom: huge, shapeless chunks of bulky silcrete.

(On the farm Witdam, ~40 km NE of Bredasdorp, ~1 km east of the R 319). This is the thickest silcrete (>10 m) in the Study Area, where huge chunks detached from the hilltop; see Field Note on disintegration).
(Grant Forbes, of the Overberg Renosterveld Research Centre, on the edge).



Bulky habits (b) - vertical cliffs (Figure 4)



Figure 4. Top and bottom: vertical cliffs of bulky silcrete. Height of cliffs ~3 m.

Columnar habit variations (1) (Figure 5).



Figure 5. Columnar silcrete variations. Top – tall (~2 m). Bottom – short (~1 m).

Columnar habit variations (2) (Figure 6)



Figure 6. Columnar silcrete variations. Top – angular. Bottom – rounded. Height ~ 1 m.

Columnar habit variations (3) (Figure 7)



Figure 7. Columnar silcrete variations. Top – cubiform. Bottom – cylindrical. Height 1-2 m.



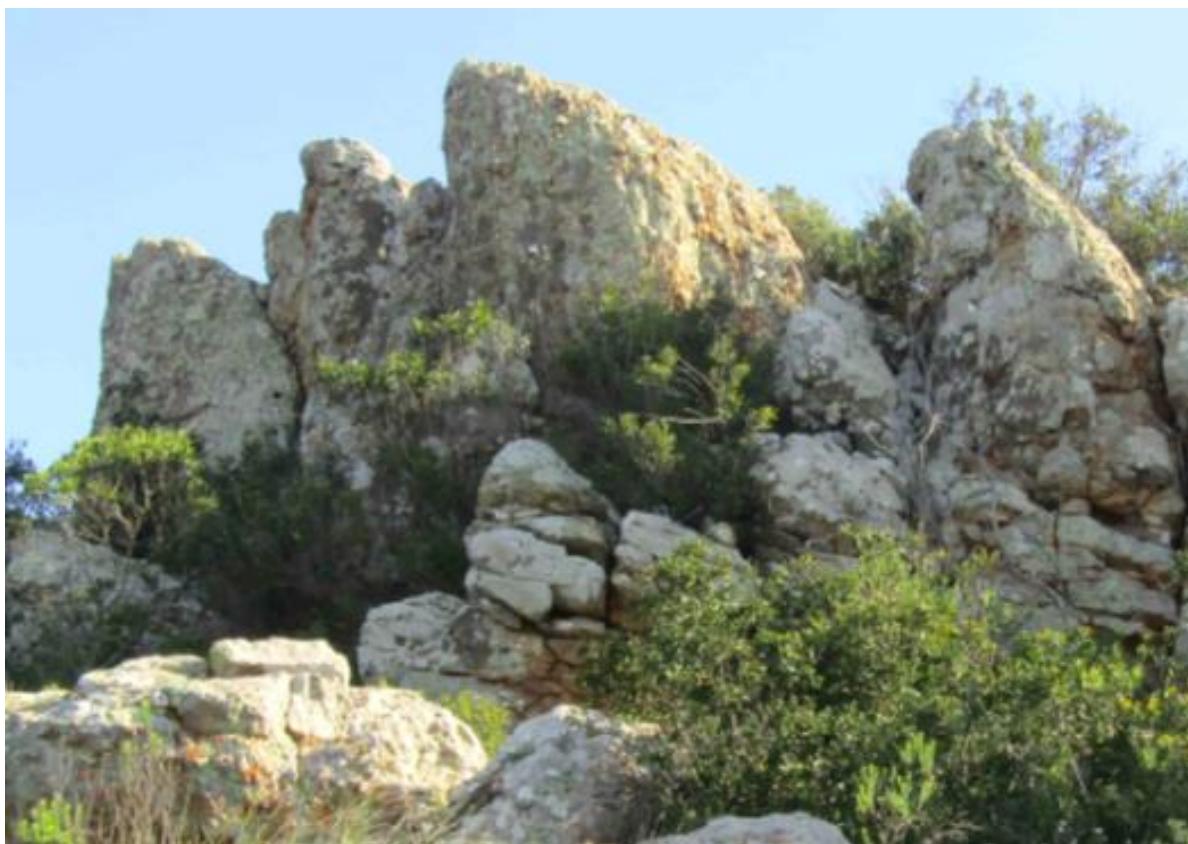
Columnar habit variations (4) (Figure 8).



Figure 8. Tiny columnar silcrete.



Columnar habit variations (5) (Figure 9)



**Figure 9. Columnar silcrete variations. Top – curved to the left. Bottom – curved to the right.
Height ~2 m.**



Columnar habit variations (6) (Figure 10)



Figure 10. Columnar silcrete variations. Top – horizontally jointed. Bottom – tilted.



Columnar habit variations (7) (Figure 11)

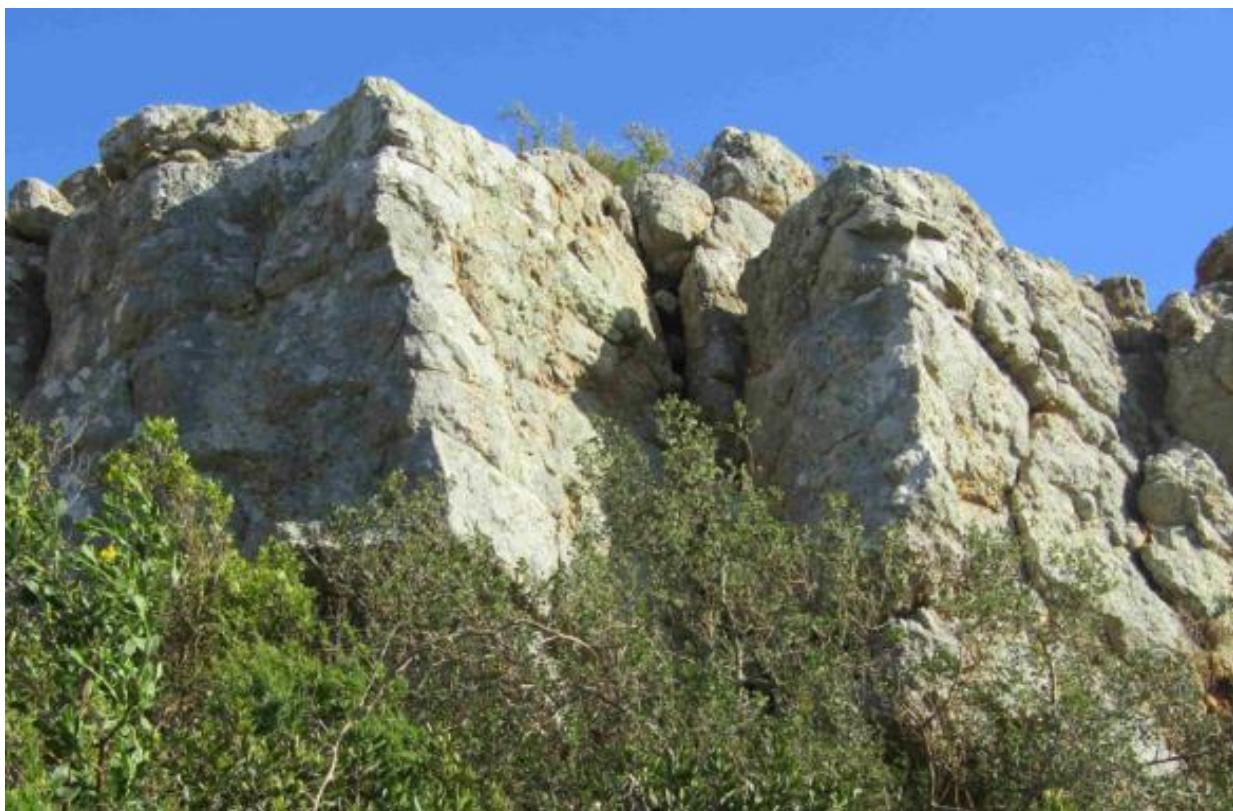


Figure 11. Columnar silcrete variations. Top – pointed. Bottom - distorted.



Plates (Figure 12).



Figure 12. Top and bottom: platy / slabby silcrete.



Lenses (Figure 13)

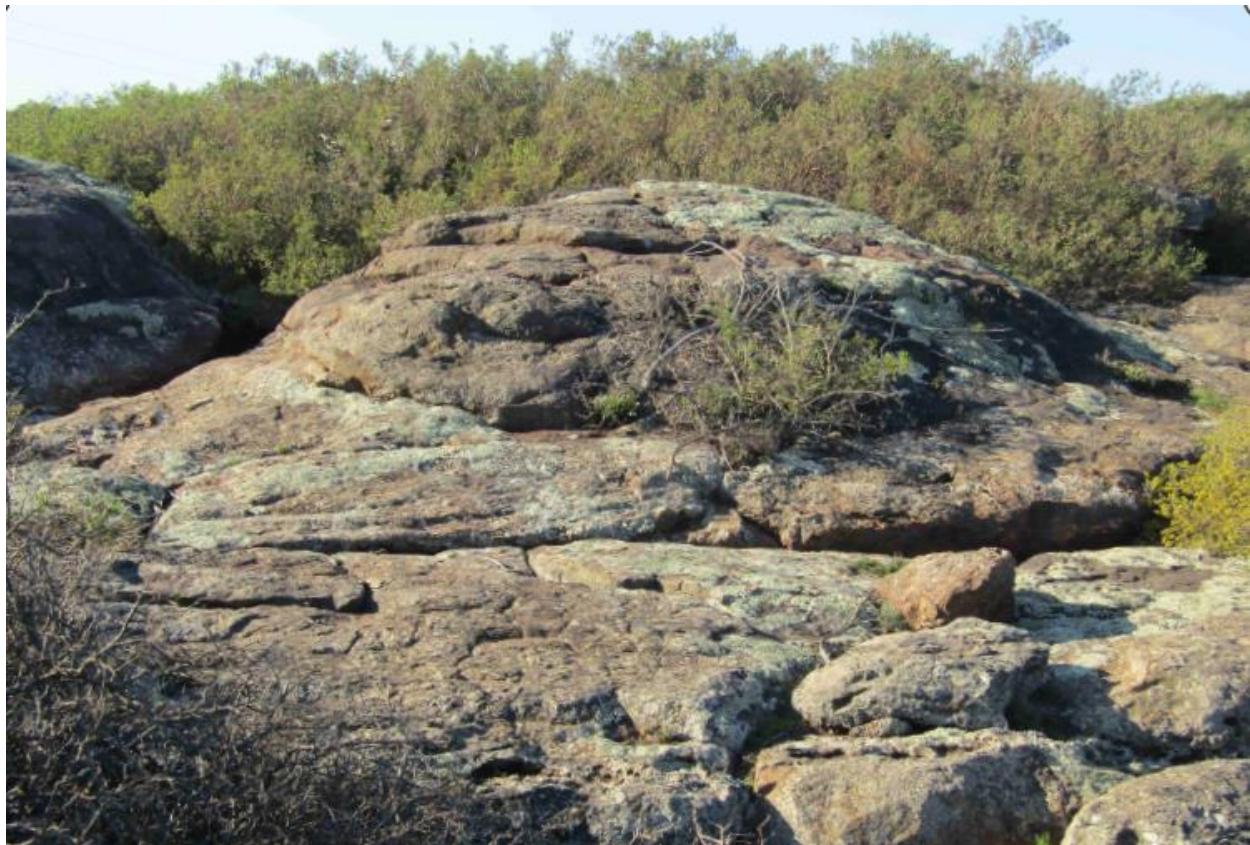


Figure 13. Top and bottom: lenticular silcrete.



Cushions and pillows (Figure 14)



Figure 14. Top – Cushions (high relief). Bottom - pillows (low relief).



Bulbs (Figure 15)

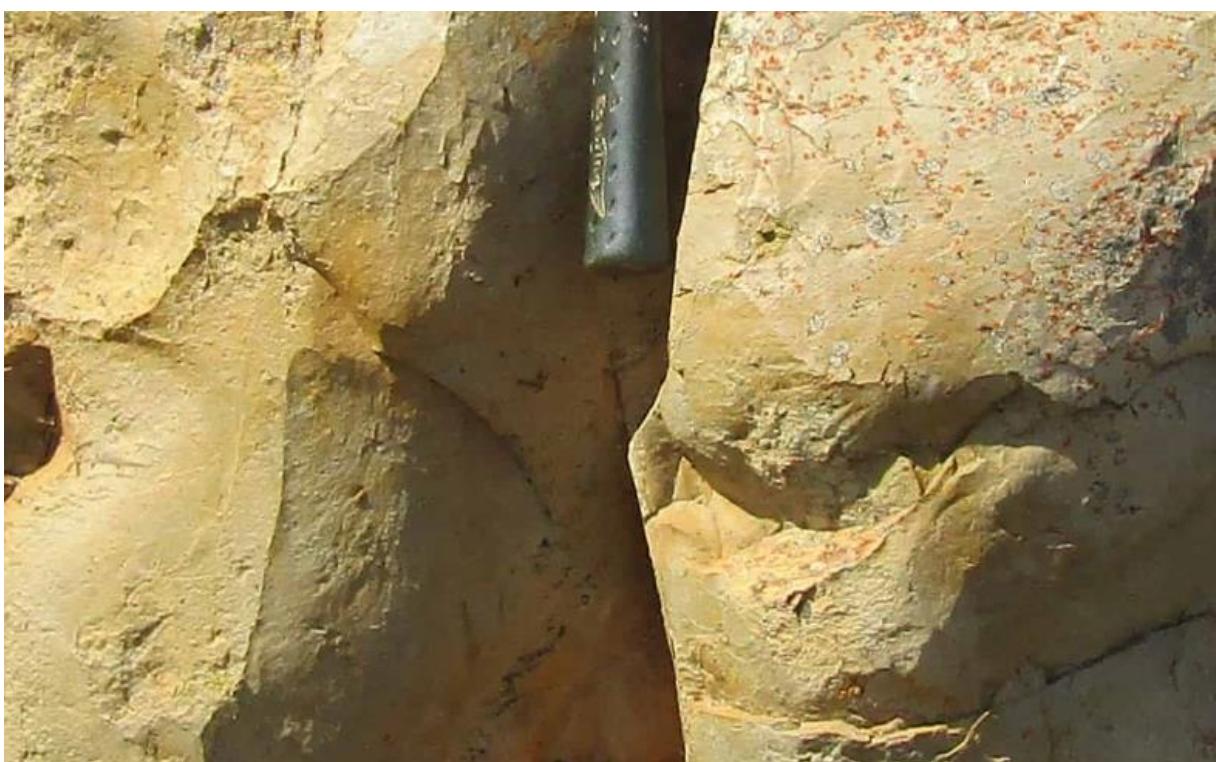


Figure 15. Top and bottom: bulbous silcrete. Note the smooth semi-glossy appearance.

Blocks and stacks (Figures 16 and 17)



Figure 16. Top and bottom – cubical (blocky) silcrete. Block size – 1-2 m.



Figure 17. Top and bottom – stacks of silcrete blocks. Block size – 1-2 m.



Overhangs and serrations (Figure 18)



18. Silcrete habits. Top – overhangs; bottom – serrations.

Cushions (Figure 19)



Figure 19. Silcrete habits. Top and bottom – cushion ‘retaining walls’



Cones (Figure 20)



Figure 20. Conical silcrete; height ~2 m.

This is the only occurrence of conical silcrete located so far in the Study Area.



Cap surface habits

Pillows



Figure 21. Top and bottom - cap surface pillows.



Cushins



Figure 22. Top and bottom - cap surface cushions.



Figure 23. Top and bottom - cap surface cushions.



Plates



Figure 24. Top and bottom - cap surface plates.



Figure 25. Top and bottom - cap surface plates.