

D. DURICRUSTS

Field Note D4a10. Pedogenic silcretes – J. Hillslope silicified shale features



Hillslope silicified feature.

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Silicified shale protrusions, forming a variety of features, have not been mentioned in the literature and may be described here for the first time. These features emerge from the slope as individual, isolated outcrops. Most of them are cavernous and heavily ferruginised. The author has identified five basic forms: 'clouds', 'flames', 'caverns', 'arches' and 'shells'.

'Clouds'

The author named these features 'clouds' as they resemble clouds of grey smoke (Figure 1).



Figure 1. Silicified shale 'cloud'. Top – view from a distance. Bottom – close view.

Where these clouds are situated on the skyline, they are easily identified (Figure 2).



Figure 2. Top and bottom: silicified shale ‘clouds, can be seen from a distance, as small but very prominent features.

The grey colour is due to the lichen (Figure 3).



Figure 3. Top and bottom: 'clouds' of silicified shale.

Some of the clouds are heavily ferruginised (Figure 4).



Figure 4. Top and bottom: a silicified and heavily ferruginised shale 'cloud'.

'Flames'

Some of the silicified features appear like flames (Figure 5).



Figure 5. Top and bottom: silicified shale 'flame'.

Caverns

Most of the silicified shale caverns in the Study Area face the east / northeast (Figures 5 and 6).



Figure 6. Top, middle and bottom: silicified shale caverns.



Figure 7. Top and bottom: closer views on the silicified caverns shown in Figure 6.

A conspicuous cavern is located on the farm Weltevrede (Figures 8 and 9).



Figure 8. Silicified shale cavern (arrow).



Figure 9. Top and bottom – closer views at the silicified shale ‘cloud’ shown above.

Arches

Some silicified features are shaped like arches (Figures 10 and 11).



Figure 10. Top and bottom: silicified shale arches.



Figure 11. Top and bottom: a silicified shale arch.

'Shells'

These features were given their names by the author, due to their resemblance to seashells (Figures 12 to 15).

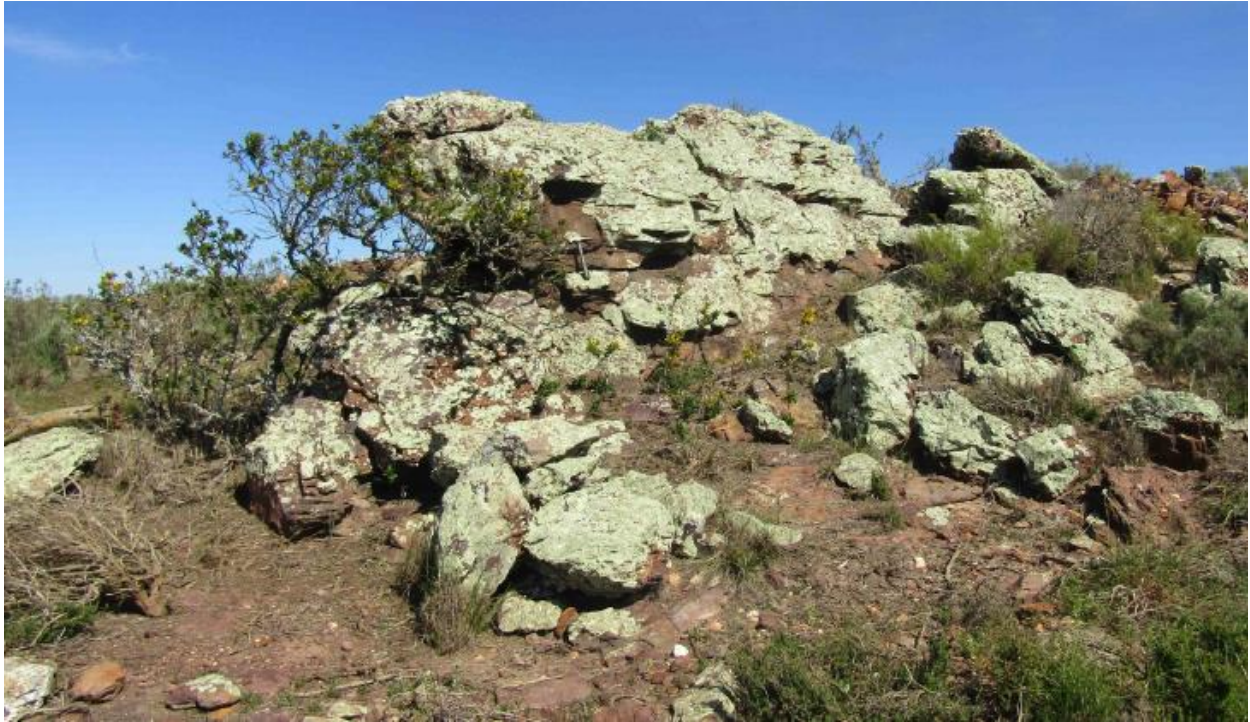


Figure 12. 'Shell' of silicified shales. Top – the back side. Bottom – the front, cavernous side.



Figure 13. Top and bottom: a 'shell' of silicified shale (arrow).



Figure 14. Top and bottom: the two sides of the 'shell' of silicified shale, shown above.



Figure 15. 'Shell' of silicified shale. Top – view from a distance (arrow); middle – view from the back; bottom – view of the front.