N. DE HOOP VLEI GORGE

Field Note N8c. Hydrology – Fountains

There are several fountains along the banks of the De Hoop Veli, at nearly all the outlets of the ravines and dry valleys, at the contact between the limestone formations and the underlying Bokkeveld shales. When the vlei is full, most of these fountains cannot be located, as they flow into the veli below the vlei level.

Very little is known about these fountains. The writing below only mentions one fountain by its name (Grootfontein) but not its exact location.

From Ann and Mike Scott's book 'The people of de Hoop", 2002:

FOUNTAINS

On the western side of the vlei, near Melkkamer, Grootfontein is believed to deliver 60 000 litres of water per hour. According to Japie Neethling, this fountain was known as *Wolwas* in early times. The sheep were washed there as their wool became dirtied by the dense bushes. They were then chased into camps to dry off before being shorn. At that stage wool fetched a price of three pennies per pound (six cents per kilogram). After the 1969 earthquakes at Tulbagh, some of the fountains in the De Hoop area are reputed to have dried up.

The vlei regularly becomes completely dry. During these periods (including in 1992, 1989, 1975, 1945 and 1903; *what about from 1992 to 2002?*) it is possible to walk across from De Hoop to Melkkamer with dry feet. Only a little water remains at the bottom of the vlei for the remaining birds, supplied by the fountains such as Fransfontein, Tierhoek and Grootfontein.

When the vlei level is low, the fountains can be discerned from the satellite images (Figures 1 to 3).

Figure 1. Satellite image of fountain water flowing into the vlei (arrows).

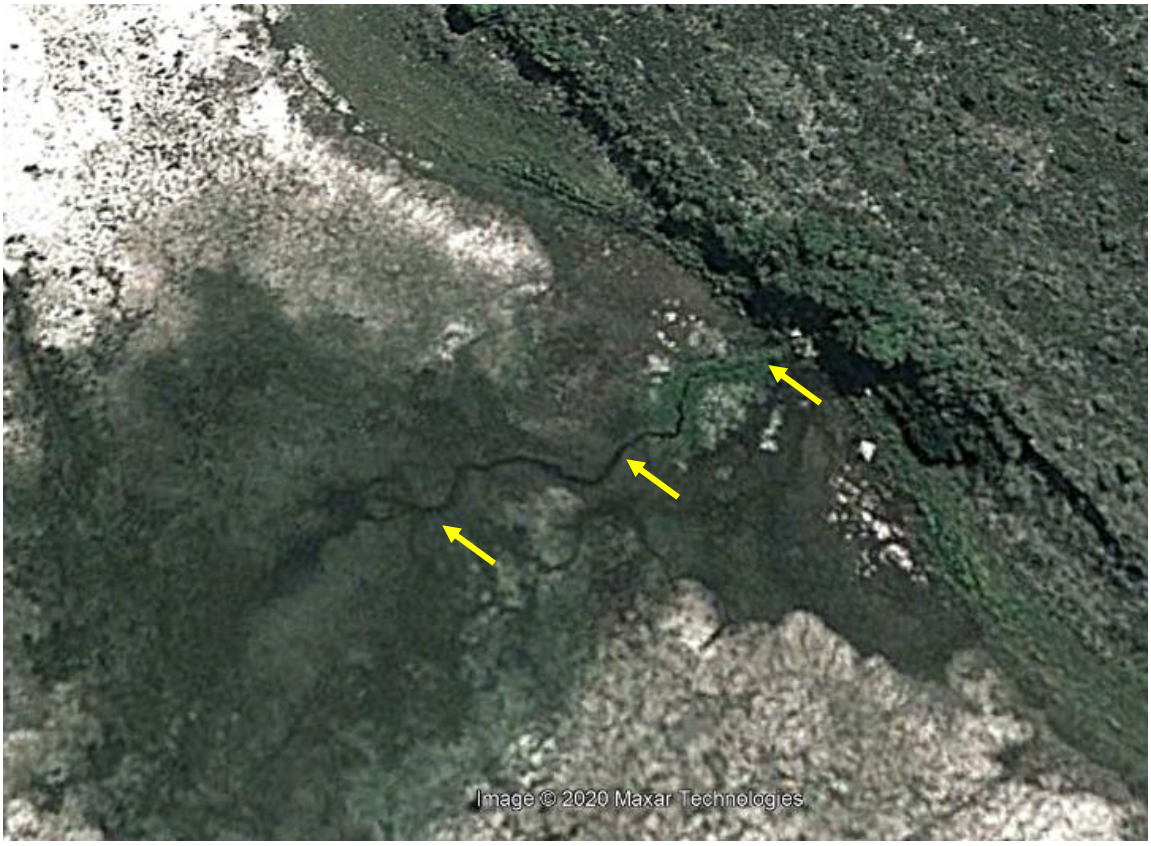

Figure 2. Satellite image of fountain water flowing into the vlei (arrows).

Figure 3. Fountain water flows into the vlei.

The vegetation around the fountains is different from the vegetation in the surrounding area (Figure 4).

Figure 4. Top and bottom: typical vegetation around De Hoop Vlei Gorge fountains.

The fountains in the Tierhoek Coves (name given by the author) appear to yield not a little water (Figures 5 to 9).

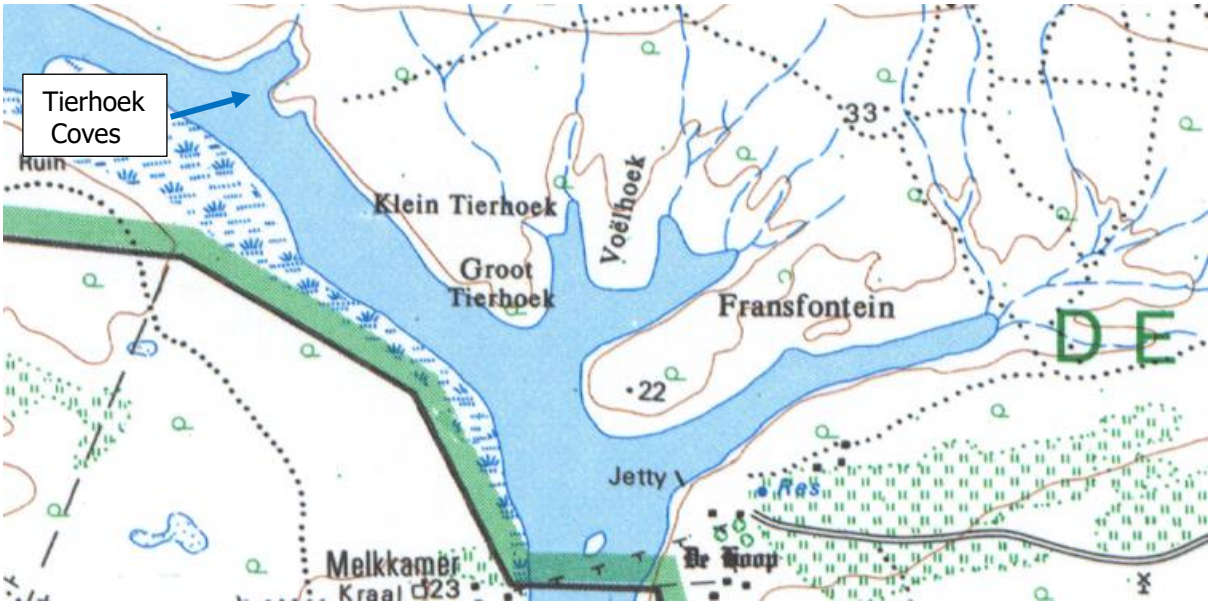

Figure 5. Topographic map showing the location of the Tierhoek Coves.

Figure 6. Satellite images showing the Tierhoek Coves. Arrow points to the fountain in the South Tierhoek Cove. [The white patches are dry, dead algal mats].

Figure 7. Satellite images showing the fountains in the North Tierhoek Cove.

Figure 8. The South Tierhoek Cove fountain.

Figure 9. The South Tierhoek Cove fountain water flows into the vlei. View to the SW.

In places the water on the drying bottom of the vlei is reddish (Figure 10).

Figure 10. Reddish water between the mud cracks of the bottom of the vlei.