**Mahwaqa – the frowning mountain**

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**Introduction**
For 28 years I have lived under the spell of this mountain. Regularly walking its grassy slopes, often alone after the death of my husband except for the company of my two dogs; experiencing its differences from dawn to dusk; exploring hidden overhangs and thrilling to the wide expanses revealed from its heights, it has become for me a solace in distress, exhilaration in joy. When I gain the summit I am free, a creature akin to all that surrounds me.

**The mountain**
Close to the small village of Bulwer that lies between 29° 45' S latitude and 29° 39' E longitude, Mahwaqa mountain is the southernmost and westernmost outlier of the main Drakensberg, the mountain range that forms the natural barrier between east-facing KwaZulu-Natal and the inland plateau of Lesotho and the Free State province of South Africa. Mahwaqa comprises two peaks separated by lower land. The northern, higher peak at 2 083 m (6 943 ft) a.s.l. is known as ‘The Summit’ and this will be the main consideration in the words that follow. The lower, more southern peak is ‘Second Peak.’

The vegetation to ‘The Summit’ is primarily grassland with Southern Mistbelt Forest (Mucina & Rutherford 2006) in the ravines where streamlets have cut back. It is not all pristine; a wattle (Acacia mearnsii) plantation, an introduction from Australia, was established on the eastern slopes but is now destroyed. Cultivated farmland surrounds the mountain and this is being increasingly reduced by the planting of alien timber trees, particularly pine, to serve the pulp industry.

**Water**
Highlands are usually watersheds; the streamlets that Mahwaqa carries on its eastern face have been directed in the foothills into small catchment dams to maintain supply through the dry periods. These dams are enchanting spots. There are fish and insects to attract cormorants, darters, kingfishers, many other birds and some small mammals. The dam above Bulwer village augments the local water supply. It is home to Egyptian Geese (some farmyard pet ducks are frequent visitors) and it attracts moorhens, herons and the Hamerkop. Duiker are often about, sometimes Large Grey Mongooses, Scrub Hares and otters. The last (Spotted-necked Otters) either singly, in pairs, or exceptionally with young, may be seen if carefully watched for. These animals move with grace and speed in the water. Rings on the water surface usually indicate waterfowl, but if no birds appear, suspect otters. Frogs, of course, are here too making ‘music’ on spring evenings and attracting their own predators, including snakes.

**Caves**
Mahwaqa has several rock shelters; one on the western side is used by baboons in inclement weather. On a ledge above, a pair of Lanner Falcons built a nest in which in December two rusty brown eggs appeared. Another shelter facing north-east is a San rock-art site. The art is probably no more than a few thousand years old as the high rainfall and temperature changes of the area are not conducive to the enduring survival of paintings.

**The vegetation and its seasonal changes**

**Forest**
Southern Mistbelt Forest occurs in intact patches in the sheltered cut back ravines where there is exclusion of fire and some protection from wind and excessive snow in winter. Like all forest, as distinct from woodland, bushveld and plantation, Southern Mistbelt Forest comprises a rich variety of vegetation.
Perhaps most handsome are the yellowwoods (*Podocarpus* spp.) (Meter et al. 2002). Some of the tallest, growing in awkward clefts, may be aged indeed having escaped felling by early European colonists who used the durable timber for ceilings and floors in their cottages. These trees bear naked seeds not enclosed in an ovary and so are looked upon as relics of an age before the flowering plants of today. There are present a number of other tree and shrub species. White Stinkwood (*Celtis africana*), Wild Figs (*Ficus* spp.), Lemonwood (*Xymalos monospora*), Cape Chestnut (*Calodendrum capense*), Wild Pomegranate (*Burchellia bubalina*) and Bride’s Bush (*Pavetta* spp.) among the familiar. These woody stalwarts support climbers, and with their furrowed and creviced bark provide ideal growing conditions for epiphytic mosses, ferns and occasionally orchids. Ground cover is dense where good light penetrates and here are ground-growing and rock-covering carpets of *Selaginella* and mosses, ferns and flowers. Granny Bonnets (*Disperis* spp.), *Streptocarpus* spp., balsams (*Impatiens hochstetteri*), begonias (*Begonia sutherlandii*) and *Thalictrum rhyncocarpum* with fern-like leaves and creamy-yellow inflorescences, are usually there spring into summer and sometimes later.

Forests, like all other vegetation types, respond seasonally to climatic change. Autumn and winter is rest, to regenerate to new life in spring. There are some exceptions to this. Tree Fuchsia (*Halleria lucida*) is unusual in that it is during the drier, colder months that its tubular, orange flowers lie in clusters against the dark bark of fairly thick branches. This development of flowers, followed in this case by cherry-sized green then red fruits, is
termed cauliflory by botanists. The flowers provide welcome nectar for hungry sunbirds and the fruits are relished by small mammals.

Forest margins are important. If they are severely damaged there is entry for wind and other destructive elements. The margins of these Southern Mistbelt Forest patches are not excessively dense as are those of other forest types. They have their own species that gradually open out into grassland. Here are Ouhout (*Leucosidea sericea*), strongly scented *Buddleja* spp., white-flowered *Dombeya cymosa* and often on precipitous rocky slopes, flowering from August to late October, is the Bottlebrush (*Greyia sutherlandii*) with angular branches tipped by aggregations of the dazzling red flowers that have occasioned the tree’s common name.

**Grassland**

Grasses perennate from soil level and so withstand the effects of natural fire, often ignited by lightning strikes; now a “tool” for farmers to ensure succulent early spring re-growth for their animals, at the same time permitting resting of other areas by eliminating fire as far as possible. Following burning, early spring rain brings into evanescent blossom tiny bulbs soon lost sight of amongst the sprouting grasses. Careful watching may reveal at ground level, white stars of *Apodolirion buchananii* and yellow, bell-shaped *Cyrtanthus breviflorus*. These are geophytes, plants with underground storage organs, bulbs, tubers, corms or rhizomes, that permit survival through time, sometimes with little aerial evidence for several years. There are many of these in the grassland, greatly differing in size, structure and habit. *Agapanthus campanulatus*, *Watsonia* spp. and *Dierama* spp. are always visible, blooming spring into summer. But no one season exactly patterns another. One spring *Agapanthus* will turn the grassveld of the western slopes blue with massed flowers; another year, blooms are sparse. *Hebenstretia dura* may whiten the green of grasses, or be almost undetectable. When winter has been severe with snow lying long on the rock outcrops, flowering in spring is usually profuse. Both plentiful water and prolonged low temperatures may be factors that influence this profusion.

Some 48–50 grass genera have already been recorded as present in the grassveld, which varies in quality. Where habitation has been erected and there is movement of people and animals, the veld is disturbed, lacking some species and with aliens such as *Agrostis montevidensis* intruding; along frequented pathways grass is absent with the exposed soil gradually eroding.

**Summit vegetation**

As spring grades into full summer ‘The Summit’ becomes a veritable rock garden of rainbow hues. Here are plants in every nook and cranny between dolerite boulders. Some of

*Disperis fanniniae* or Granny Bonnets (*Orchidaceae*) with *Streptocarpus gardenii* in January.
these plants such as *Sebaea thodeana*, a relative of the gentians, with its white, faintly pink tinted flowers, are not seen at lower altitudes. Others are present in great numbers. There are white Wild Scabiosa (*Scabiosa columbaria*), daisies (*Gerbera ambigua*), blue aristeas (*Aristea cognata* and *A. woodii*), glowing pink *Cyclamen racemosum*, yellow flowers accompanied by hairy leaves (*Hypoxis* spp.), and sometimes patches of white, pink and red flowered *Rhodohypoxis baurii*. Rock stepping rather than walking becomes necessary to avoid damage. There are ground orchids too – pink and white *Satyrium* spp. in plenty; others are more scattered, spread into the surrounding grassveld and not blooming every year like the handsome pink-spotted *Disa crassicornis* and the varied species of *Eulophia*. In this bounty careful searching is likely to reveal some ‘mountain grasses’ that are more delicate than their robust tropical relatives, (for example *Agrostis* spp.). They have a less productive photosynthetic system, flourishing in dampness under shaded protection. Searching fringes of more open rock outcrops may expose sedges (*Cyperaceae*) that are often overlooked. They somewhat resemble grasses, but are mostly less conspicuous and far less well known, apart from ‘water grass’ (*Cyperus esculentus*) that has become a much disliked worldwide weed of cultivation.

Birds, of course, are present where there are food feasts of insects and nectar – Orange-breasted Rockjumpers, Ground Woodpeckers, chats, and rock-thrushes among them. Cape Robins and Barratt’s Warblers make their nests in the nearby Ouhout bushes; Rock Pigeons call from the cliffs and swifts and Rock Martins circle overhead. From ‘The Summit’ the cliffs of ‘Second Peak’ are visible below making possible splendid observation of the community of life there. This is where Black Eagles nested until disturbed by the buzzing of microlites exploring the high cliffs.

**Autumn**

Calm autumn days of mild sunshine out of blue skies quite rapidly replace late summer heat. Noticeable are vegetational changes. Grass, tall now and dense, has yellowed with, here and there, patches of stronger colour; the red of Red Grass (*Themeda triandra*) and the glowing pink of Bract or Spear Grass (*Monocymbium cerasiforme*). The latter is generally regarded as an indicator of low grade pasture; this aside, its colour and the arrangement of its bracts make it distinctive and beautiful. Flowering now are taller species that overtop the grasses, many of them well known like the velvety

Waterfall following heavy rain.
orange *Leonotis leonurus* ‘Tswala ba’nyoni’ (Beer of the Birds), as the Zulu people know it. It is a member of Lamiales, the family to which the salvias belong; there are a number of other representatives of this family blooming, mostly among the grasses, but some need damper, more shaded spots, like the more delicate of the *Plectranthus* spp. This genus in particular has leaves each with its own fragrance when brushed against or crushed. By this season night temperatures are low and, early morning, small puddles are iced over. Winter snows soon begin; these are periodic differing in severity and duration. Grassland that has not been burned becomes a fairyland of white in the sun’s first rays.

**Changes over time**

During 28 years there have, of course, been changes in the area of the mountain. Natural change is slow and mostly gradual, usually insufficiently noticeable to human senses to be comprehended and its consequences understood. In contrast, human concepts change rapidly echoing conflicting ideas and needs. An increasing human presence around the mountain has brought about immediate change, much of it well intended, but not always well implemented; some of it irresponsible and damaging.

Establishment of the wattle plantation was undertaken no doubt with good intent as a source of useful fuel and bark, the tannin extracted from the bark serving at that time in the conversion of animal hides into leather. Useful as wattles are, there is a downside. Producing copious hard-coated seeds that remain viable for years, the trees have become an invasive problem, despite their ability to improve soil quality by the nitrogeneous nutrients released into their roots by the metabolism of symbiotic bacteria. Again with the good intention of returning the wattle wood to natural grassland, the trees were felled by a considerable
labour force that lived and worked without provision of adequate necessities. Litter and unpleasant human waste accumulated among the prostrate branches that were themselves a hazard to movement until logs were lifted, trash collected, bundled and burnt. With such disturbance, birds and small mammals that had adapted to life in a plantation rather than natural forest were gone to find safer haven.

During their sojourn some birds had deposited quantities of Bugweed (*Solanum mauritianum*) seed. This shrub is arguably a less acceptable alien than wattle. Seed germination and growth of young plants was rapid, taking finance, effort and time to eradicate. This plant is injurious to human health. It contains poisonous principles and its aerial parts are clothed in claw-like hairs that when dry float atmospherically; inhaled into bronchi they cause discomfort and possible asthmatic symptoms as, because of their structure, the hairs are difficult to detach.

Eventually *Eragrostis curvula* seed was scattered. This grass, among the most variable of South African species, favours high nitrogen levels. Young plants are succulent to grazers, but lacking enough of them in Bulwer, grew vigorously and densely, covering paths and reaching shoulder height in parts, made movement for individuals almost impossible and often dangerous because of obscuring ground-level irregularities and obstacles. This is the present situation. What will become of this *Eragrostis*-covered land? Will natural grassland ever return without expenditure of finance (not necessarily available) to replant
other indigenous grass species, control shrub encroachment including the re-growth of wattle from the rich and lasting seed bank, and to remove other aliens, many of which are plant opportunists at the ready to occupy any opening. Would it not have been wiser to undertake the wattle wood clearance gradually, little by little? And what of the surrounding privately owned farmland, liable for sale, then probably to be planted to exotic invasive pine and eucalypts? Is it not distressing to consider the decisions farmers face? Isolation is beset by problems of security; sale of land is questionably against the conservation of our natural heritage! Poor fellows!

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References


*Papaver aculeatum*, KwaZulu-Natal’s only indigenous poppy, blooming in summer.