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TO WHOM IT MAY CONCERN

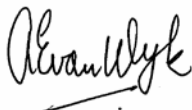
REGENERATION CAPACITY OF PRIMARY HIGHVELD GRASSLAND

The Grassland Biome of South Africa is one of only a few primary grassland regions in the world. Frost, fire and grazing are amongst the factors that maintain the grass dominance and prevent the establishment of trees. Fire is a natural factor and regular burning is essential for maintaining the structure, functioning and biodiversity of this biome.

Highveld grasslands are unique, stable ecosystems with a rich and highly specialized plant and animal life, both above and below ground. The bulk of the plant species in a grassland are non-grassy herbs ('wild flowers'), most of which are perennial plants with pronounced underground storage structures, perhaps the majority which can live for several decades, some even for hundreds of years. Species turnover in these grasslands is extremely slow. The Grassland Biome has a very high biodiversity, at some scales second only to that of the Fynbos Biome. The majority of rare and threatened plant species in the summer rainfall region of South Africa are restricted to high-rainfall grasslands, making this the vegetation type in most urgent need of conservation.

This letter serves to confirm that transformation of Highveld grasslands by ploughing and similar disturbances is considered irreversible, at least on the human time scale. Although grassland of which the soil profile has been disturbed does become revegetated over time, we have *never* seen any of these areas recovering their *original* botanical diversity. Today areas of Highveld grassland last ploughed in the early 20th century still reflect the drastic floristic impoverishment caused by the original destructive impact. Claims that high-rainfall temperate grassland of which the soil profile has been disturbed can fully recover floristically within a reasonable period of time have no scientific support whatsoever. As far as biodiversity is concerned, such previously disturbed but subsequently revegetated areas remain *highly impoverished* versions of the original undisturbed grassland.

Yours sincerely,



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A.E. van Wyk
Professor