of the Knysna Forest veld type is exceptional. With between 20 per cent and 23 per cent of their area included in unafforested state land, conservation of the Alexandria Forest, False Macchia and *Themeda -Festuca* Alpine Veld is also outstanding. The contribution of the National Parks and provincial conservation agencies to the conservation of these veld types is, in terms of their total area, relatively small, being less than 1,8 per cent in all cases.

A very well conserved veld type is the Macchia with 14,5 per cent of its area conserved, and well conserved veld types are Northeastern Mountain Sourveld (7,6 per cent), and Coastal Forest and Thornveld (6,0 per cent).

Although the distribution of the areas conserved by the State Forestry Department and those conserved by the National Parks and provincial reserves is similar with respect to veld type, the role of these two main groups of conservation agencies is essentially complementary. The veld types best conserved by the Forestry Department are those least well covered by the National Parks and provincial reserves, and *vice versa*. The unafforested lands of the State Forest Reserves are thus playing a major role in conserving well to outstandingly well some six veld types. The satisfactory permanent conservation of these veld types will depend upon the continued management for conservation of these unafforested state lands.

4.4 *Total areas of veld types under conservation*

Table 4 and Map 4 summarize the general conservation status of the 70 veld types of South Africa according to the proportion of their total area under permanent conservation by state and provincial authorities. Table 4 shows:-

(a) There are only 12 out of the total 70 veld types in which the major elements constituting these veld types may be considered safely conserved (i.e. more than 5 per cent). Six of these veld types, with at least 20 per cent of their area under conservation, that are outstandingly well conserved, are the Knysna Forest, Alexandria Forest, Lowveld, Mopani Veld, *Themeda-Festuca* Alpine Veld and False Macchia. The six remaining well to very well conserved veld types with 5 per cent to 20 per cent of their area conserved are the Arid Lowveld, Macchia, Coastal Forest and Thornveld, Northeastern Mountain Sourveld, Lowveld Sour Bushveld, and Kalahari Thornveld and Shrub Bushveld. However, in at least three of these veld types, Coastal Forest and Thornveld, Kalahari Thornveld and Shrubveld, and *Themeda-Festuca* Alpine Veld, important extensive vegetation types are not conserved. These include various types of coast forest and coast communities, the extensive shrubveld transitions from the Kalahari to the surrounding vegetation, and the Cape Province extension of the *Themeda-Festuca* Alpine Veld.

(b) A further six veld types, with between 1 per cent and 5 per cent of their area under permanent conservation, have a number of their major elements safely conserved, but many important elements are not being conserved. These elements include a number of important forests and allied communities in the Pondoland Coastal Plateau Sourveld, Ngongoni Veld, Highland Sourveld and Dohne Sourveld, the Gwaloweni Forest in the Zululand Thornveld, and fynbos in the Strandveld of the West Coast and Coastal Macchia.

(c) There are 52 veld types with 0 per cent to 0,9 per cent of their area under permanent conservation that are extremely poor or lacking in conservation. Thirty-two of these veld types lack any form of permanent conservation. All these veld types are conservation priorities, but the general lack of conservation in the arid types of vegetation is particularly significant. These Karoo and Karroid Bushveld Types of vegetation which, with the False Karoo Types, cover about 35 per cent of South Africa, have virtually no conservation and are (with the better conserved Fynbos and Macchia vegetation) renowned as botanically unique South African types of vegetation. The prevalent land use of the Karoo veld types is extensive farming and Acocks (1953), the *Report of the Desert Encroachment Committee (1951), and others, have repeatedly emphasized the deterioration in these areas as a result of farming practices. The urgent need for extensive rehabilitation as well as nature conservation suggests that a policy for acquiring large tracts of country for conservation would be in the national interest.

(d) It is generally concluded that the major conservation deficiencies in South Africa lie in the Karoo and Karroid Bushveld and Grassland Types of vegetation, where 42 veld types have virtually none or no conservation, and in the Tropical Bush and Savanna Types to which nine of the 10 remaining veld types extremely lacking in conservation belong. New and large conservation areas in these veld types are needed to conserve the main ecological and plant geographical types of South African vegetation and flora; but additional reserves are also needed to conserve certain important and very local ecosystems and species in the remaining 18 veld types, especially the Sclerophyllous Bush (Fynbos) and Temperate and Transitional Forest and Scrub Types, and in certain veld types belonging to the Coastal Tropical Forest and Thornveld Types. Apart from very minor deficiencies, the conservation status is outstanding for six of these 18 veld types, and very good for another six veld types.

**Report of the Desert Encroachment Committee. 1951. Pretoria: Govt. Printer.*

5. *Conservation requirements in the Bantu Homelands*

Agricultural and forest land in the Bantu Homelands of South Africa covers over 14 million ha (Abstr. Agric. Stat. *loc. cit.*). The Bantu areas extend from the Ciskei and Transkei in the eastern Cape Province, northwards through Natal and Zululand, the northeastern, northern and western Transvaal, to the northern Cape Province. Because of their geographic location, a number of these areas figure prominently in the national assessment of vegetation conservation status. The rapid progress of these Bantu Areas to political independence also causes considerable concern for the future conservation of certain vegetation types occurring in these Areas. Bantu Areas of particular significance to vegetation conservation are those in the northern and northeastern Transvaal, Natal, the Transkei and Ciskei. A number of vegetation types are unique to these Bantu Areas.

One of the main features of conservation value and interest in the Bantu Areas are the various kinds of evergreen forest and their allied communities. As indicated previously, such forest communities are very limited in extent in South Africa. The large forests, many occurring in the Bantu Areas, are of major scientific interest. Their size permits a degree of forest development and successional maturity not found in the small forests where the climax forest environment is not attained. On the other hand, because of their extremely patchy distribution, each forest patch has unique features that form the sole record of what was possibly a far more extensive vegetation type belonging to early Bantu and pre-Bantu times. Many of the forests are closely linked with the Bantu history and formerly played, sometimes still playing, an important role in their culture. Once destroyed, re-establishment of the forests to their former condition is so slow as to be for practical purposes a permanent loss.

(a) *The Blouberg Area of the northern Transvaal*

Yellow wood (*Podocarpus latifolius*) forests on this isolated mountain outlier of the Soutpansberg are of considerable plant geographical and ecological significance as the northwesternmost outlier of evergreen montane forest in South Africa. The area is, however, not well known botanically owing to its isolation and general inaccessibility. Unfortunately, extensive destruction of the montane forest is occurring, together with severe deterioration by soil erosion of the montane habitats. Water conservation is of particular significance here. Orographic precipitation on the higher mountain parts is a chief source of moisture for the surrounding dry area and is thus closely linked to preservation of the montane vegetation and habitat.

(b) *Vendaland*

This area extends from the eastern Soutpansberg and its outliers northwards to the Limpopo River. It has the northernmost montane

forests in South Africa, which link with the Rhodesian-Mozambique forests some 160 km to the north across the Limpopo Valley.

The cultural tradition of the Venda people has provided in the sacred Tathe Vondo forest what is probably one of the best conserved forests in South Africa. It includes exceptionally large specimens of *Cassipourea gerrardii*. Other features of interest conserved by cultural tradition include Lake Fundudzi, various forest and scrub patches, and a grove of a bamboo (possibly *Oxytenathera* sp.) that is of exceptional ethno-botanical and phytogeographical interest.

Vendaland is one of the best conserved Bantu areas, this conservation being directed to those features of chief conservation interest. This conservation interest, which is founded on cultural tradition appears likely to continue, but does not apply to the surrounding area, such as the catchment of Lake Fundudzi where intensive and not always judicious farming practices cause some silting of the Lake. The long-term viability of some of the sacred small ecosystems is thus to some degree doubtful because of their size and the modifications to their surrounding environment.

(c) *Natal*

The Bantu Areas of Natal cover considerable areas in the coast and coast hinterland where the vegetation is chiefly Valley Bushveld and Coastal Tropical Forest Types (*sensu* Acocks). With relatively few exceptions, such as the Weza, Karkloof, Dukuduku and Ngome Forests, evergreen semi-coast and coast forests are best represented in the Bantu Areas where they are of an area and stature generally not attained elsewhere. Features of major conservation interest in these Bantu Areas include the following:-

(i) The *Tongaland area* of northeastern Zululand from the Pongola River eastwards. The unique range of ecosystems from estuarine and lake to swamp and dry forest, dry scrub and savanna, is considered a major conservation priority for South Africa.

(ii) The *Gwaloweni Forest* on the Lebombo Mountains. This is an extensive transitional coast type of forest that possesses a number of unique floral elements and which is being very rapidly destroyed by cultivation and cutting. At the present rate of destruction it is likely to be a scrub relic within the very near future.

(iii) The *Ngoye Forest* is an extensive forest of some 2 000 ha that has for many years been the object of attempts by conservationists to obtain permanency of conservation. It is a transitional coast type of forest that has a number of distinctive floral and faunal elements. Under the care of the Department of Forestry the forest has been well maintained up till now.

(iv) The *Qudeni and Nkandla Forests* covering several thousand ha on steep country have for many years been well conserved by the Department of Forestry. These forests are at the inland limit of the more coastal types of forest and are located amongst some of the finest scenery in Natal. Together with the Ngoye Forest, they are traditional Zulu Forests rich in historical incident, the still guarded grave of the great Zulu chief, Cetewayo, being in the Nkandla Forest.

(v) *Valley Bushveld*, which is one of the most poorly conserved veld types in South Africa, has only two reserves of slightly more than 2 000 ha in Natal. It occurs extensively in the Bantu Areas, especially in the Tugela Valley. In both European and Bantu Areas, this veld type of the hot and dry valleys of the southeastern parts of South Africa has undergone severe deterioration. Parts of the lower Tugela and Buffalo River valleys, which have a spectacularly steep and rugged topography and are really unsuited to farming, would ideally provide conservation areas of unique and major interest (see Edwards 1967).

(d) *The Transkei and Ciskei*

The Bantu Homelands of the Transkei and Ciskei cover a major block of country that separates the more tropical vegetation of Natal from the more temperate types of the eastern Cape Province. Over 85 per cent of one veld type, the Pondoland Coastal Plateau Sourveld, is restricted to the Pondoland area of the Transkei. Tropical vegetation elements, such as the mangrove woodlands, reach their southernmost African distribution along the Wild Coast. Some of the main features of conservation interest include:-

(i) The *Pondoland Coastal Plateau Sourveld* with its forests, fynbos elements and other distinctive plant communities, including the endemic palm, *Jubaeopsis caffra.*

(ii) The *Coast Forests,* often very extensive, such as at Egossa in Pondoland, the Dwessa Forest north of the Nabara River, and many along the Wild and Pondoland coasts. These forests are of considerable scientific interest because of their plant geographical position and topographic habitats.

(iii) The *Mangrove Woodlands*, well developed in estuaries such as those of the Ntafufu and Mngazana Rivers.

(iv) The *Ngongoni Veld*, with its forests and allied vegetation that reaches its southern geographical limit north of Umtata.

(v) The montane forests of the *Highland Sourveld* and *Dohne Sourveld* variations of this veld type, such as those of the Ngele Mountains, mountains west of Umtata, and the extensive forests and many

forest patches in the Keiskammahoek-Stutterheim-King William's Town triangle.

(vi) The *Valley Bushveld,* most extensively developed in the Valleys of the Umzimvubu, Bashee and Kei Rivers. Similar considerations apply as indicated in the same veld type occurring in the Bantu Area of Natal discussed previously.

It is recommended that attention be devoted as soon as possible to the development of adequate conservation of the many unique features found in the Bantu Areas of South Africa. The scenic, cultural, historical and scientific value of many areas requiring conservation could be exploited and developed in such a way as to provide much needed economic returns for the Bantu people and to possibly exceed in the long-term the short-term gains from cultivation, pastoral farming and even afforestation. It is suggested that conservation in the Bantu areas be considered as a rational form of land use from which an income can be derived when linked with tourism and outdoor extensive recreation, such as controlled angling in the coast areas, and even well controlled utilization of indigenous plant and animal resources.

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Table 3

Conservation areas for veld types of South Africa
(Veld Types from Acocks 1953)

I Coastal Tropical Forest Types						
Veld Type	Area km²*					
	Cape Prov.	Tvl.	O.F.S.	Natal	Total S.A.	% of Total S.A.
1. Coastal Forest and Thornveld	5 104	–	–	14 984	20 088	1,7
2. Alexandria Forest	2 023	–	–	–	2 023	0,2
3. Pondoland Coastal Plateau Sourveld	626	–	–	104	730	0,06
4. Knysna Forest	3 756	–	–	–	3 756	0,3
5. 'Ngongoni Veld	2 649	–	–	8 481	11 130	1,0
6. Zululand Thornveld	–	157	–	3 226	3 383	0,3
7. Eastern Province Thornveld	6 260	–	–	–	6 260	0,5
					47 370	4,0
	Provincial and National Parks Conservation Areas km²					
	Cape Prov.	Tvl.	O.F.S.	Natal	Total S.A.	% of Veld Type
1. Coastal Forest and Thornveld	–	–	–	563,76	563,76	2,7
2. Alexandria Forest	0,54	–	–	–	0,54	0,03
3. Pondoland Coastal Plateau Sourveld	–	–	–	15	15	2,1
4. Knysna Forest	33,16	–	–	–	33,16	0,9
5. 'Ngongoni Veld	–	–	–	10,16	10,16	0,1
6. Zululand Thornveld	–	–	–	165,50	165,50	4,9
7. Eastern Province Thornveld	2,43	–	–	–	2,43	0,04
					790,55	1,7
	Non-afforested Land in State Forest Reserves Area km²					
	Cape Prov.	Tvl.	O.F.S.	Natal	Total S.A.	% of Veld Type
1. Coastal Forest and Thornveld	50,1	–	–	1162,0	1212,1	6,0
2. Alexandria Forest	449,1	–	–	–	449,1	22,2
3. Pondoland Coastal Plateau Sourveld	–	–	–	–	–	–
4. Knysna Forest	1765,3	–	–	–	1765,3	47,0
5. 'Ngongoni Veld	–	–	–	129,3	129,3	1,2

* Area km² (x 100 = ha).

Table 3 *(continued)*

6. Zululand Thornveld	–	–	–	–	–	–
7. Eastern Province Thornveld	6,5	–	–	–	6,5	0,1
					3562,3	7,5

II Inland Tropical Forest Types

Veld Type	Area km²					
	Cape Prov.	Tvl.	O.F.S.	Natal	Total S.A.	% of Total S.A.
8. Northeastern Mountain Sourveld	–	8 917	–	624	9 541	0,8
9. Lowveld Sour Bushveld	–	11 120	–	–	11 120	1,0
					20 661	2,0
	Provincial and National Parks Conservation Areas km²					
	Cape Prov.	Tvl.	O.F.S.	Natal	Total S.A.	% of Veld Type
8. Northeastern Mountain Sourveld	–	148,55	–	–	148,55	1,6
9. Lowveld Sour Bushveld	–	648,79	–	–	648,79	5,8
					797,34	3,9
	Non-afforested Land in State Forest Reserves Area km²					
	Cape Prov.	Tvl.	O.F.S.	Natal	Total S.A.	% of Veld Type
8. Northeastern Mountain Sourveld	–	645,7	–	75,4	721,1	7,6
9. Lowveld Sour Bushveld	248,5	–	–	–	248,5	2,2
					969,6	4,7

III Tropical Bush and Savannah Types

Veld Type	Area km²					
	Cape Prov.	Tvl.	O.F.S.	Natal	Total S.A.	% of Total S.A.
10. Lowveld	–	7 343	–	11 342	18 685	1,6

Table 3 *(continued)*

11. Arid Lowveld	–	17 100	–	624	17 724	1,5
12. Springbok Flats Turf Thornveld	–	3 409	–	–	3 409	0,3
13. Other Turf Thornveld	–	7 973	–	–	7 973	0,7
14. Arid Sweet Bushveld	–	18 936	–	–	18 936	1,6
15. Mopani Veld	–	20 719	–	–	20 719	1,8
16. Kalahari Thornveld and Shrub Bushveld	124 144	7 186	8 388	–	139 718	12,1
17. Kalahari Thornveld invaded by Karoo	14 398	–	499	–	14 897	1,3
18. Mixed Bushveld	–	43 170	–	–	43 170	3,7
19. Sourish Mixed Bushveld	3 756	29 584	–	–	33 340	2,9
20. Sour Bushveld	–	18 306	–	–	18 306	1,6
					336 877	29,0

	Provincial and National Parks Conservation Areas km^2					
	Cape Prov.	Tvl.	O.F.S.	Natal	Total S.A.	% of Veld Type
10. Lowveld	–	4 160,36	–	894,77	5 055,13	27,1
11. Arid Lowveld	–	3 503,11	–	–	3 503,11	19,8
12. Springbok Flats Turf Thornveld	–	–	–	–	–	–
13. Other Turf Thornveld	–	–	–	–	–	–
14. Arid Sweet Bushveld	–	16,74	–	–	16,74	0,1
15. Mopani Veld	–	5 320,0	–	–	532,0	25,7
16. Kalahari Thornveld and Shrub Bushveld	9 597,87	–	–	–	9 597,87	6,7
17. Kalahari Thornveld invaded by Karoo	–	–	–	–	–	–
18. Mixed Bushveld	–	304,36	–	–	304,36	0,7
19. Sourish Mixed Bushveld	–	56,08	–	–	56,08	0,2
20. Sour Bushveld	–	28,96	–	–	28,96	0,2
					19 071,65	5,7

	Non-afforested Land in State Forest Reserves Area km^2					
	Cape Prov.	Tvl.	O.F.S.	Natal	Total S.A.	% of Veld Type
10. Lowveld	–	65,3	–	–	65,3	0,3

Table 3 *(continued)*

11. Arid Lowveld	–	–	–	–	–	–
12. Springbok Flats Turf Thornveld	–	–	–	–	–	–
13. Other Turf Thornveld	–	–	–	–	–	–
14. Arid Sweet Bushveld	–	–	–	–	–	–
15. Mopani Veld	–	–	–	–	–	–
16. Kalahari Thornveld and Shrub Bushveld	–	–	–	–	–	–
17. Kalahari Thornveld invaded by Karoo	–	–	–	–	–	–
18. Mixed Bushveld	–	–	–	–	–	–
19. Sourish Mixed Bushveld	–	10,3	–	–	10,3	0,03
20. Sour Bushveld	–	–	–	–	–	–
					75,6	0,02

IIIA False Bushveld Types

Veld Type	Area km^2					
	Cape Prov.	Tvl.	O.F.S.	Natal	Total S.A.	% of Total S.A.
21. False Thornveld of Eastern Province	2 386	–	–	–	2 386	0,2
22. Invasion of Grassveld by *Acacia karroo*	5 056	–	–	–	5 056	0,4
					7 442	0,6
	Provincial and National Parks Conservation Areas km^2					
	Cape Prov.	Tvl.	O.F.S.	Natal	Total S.A.	% of Veld Type
21. False Thornveld of Eastern Province	–	–	–	–	–	–
22. Invasion of Grassveld by *Acacia karroo*	–	–	–	–	–	–
	Non-afforested Land in State Forest Reserves Area in km^2					
	Cape Prov.	Tvl.	O.F.S.	Natal	Total S.A.	% of Veld Type
21. False Thornveld of Eastern Province	–	–	–	–	–	–
22. Invasion of Grassveld by *Acacia karroo*	–	–	–	–	–	–

Table 3 *(continued)*

IV Karoo and Karroid Bushveld Types

Veld Type	Area km²					
	Cape Prov.	Tvl.	O.F.S.	Natal	Total S.A.	% of Total S.A.
23. Valley Bushveld	15 939	–	–	8 325	24 264	2,1
24. Noorsveld	2 745	–	–	–	2 745	0,2
25. Succulent Mountain Scrub (Spekboomveld)	8 764	–	–	–	8 764	0,8
26. Karroid Broken Veld	33 853	–	–	–	33 853	2,9
27. Central Upper Karoo	19 406	–	–	699	20 105	1,7
28. Western Mountain Karoo	19 744	–	–	–	19 744	1,7
29. Arid Karoo and Desert False Grassveld	68 573	–	–	–	68 573	5,9
30. Central Lower Karoo	9 872	–	–	–	9 872	0,9
31. Succulent Karoo	33 178	–	–	–	33 178	2,9
32. Orange River Broken Veld	33 371	–	–	–	33 371	2,9
33. Namaqualand Broken Veld	28 459	–	–	–	28 459	2,5
34. Strandveld of West Coast	6 308	–	–	–	6 308	0,5
					289 236	25.0

	Provincial and National Parks Conservation Areas km²					
	Cape Prov.	Tvl.	O.F.S.	Natal	Total S.A.	% of Veld Type
23. Valley Bushveld	75,15	–	–	22,78	97,93	0,4
24. Noorsveld	–	–	–	–	–	–
25. Succulent Mountain Scrub (Spekboomveld)	–	–	–	–	–	–
26. Karroid Broken Veld	25,70	–	–	–	25,70	0,1
27. Central Upper Karoo	–	–	–	–	–	–
28. Western Mountain Karoo	–	–	–	–	–	–
29. Arid Karoo and Desert False Grassveld	–	–	–	–	–	–
30. Central Lower Karoo	–	–	–	–	–	–
31. Succulent Karoo	–	–	–	–	–	–
32. Orange River Broken Veld	37,32	–	–	–	37,32	0,1
33. Namaqualand Broken Veld	52	–	–	–	52	0,2
34. Strandveld of West Coast	3,90	–	–	–	3,90	0,1
					216,85	0,1

Table 3 *(continued)*

	Non-afforested Land in State Forest Reserves Area in km^2					
	Cape Prov.	Tvl.	O.F.S.	Natal	Total S.A.	% of Veld Type
23. Valley Bushveld	98,3	–	–	–	98,3	0,4
24. Noorsveld	–	–	–	–	–	–
25. Succulent Mountain Scrub (Spekboomveld)	–	–	–	–	–	–
26. Karroid Broken Veld	–	–	–	–	–	–
27. Central Upper Karoo	–	–	–	–	–	–
28. Western Mountain Karoo	–	–	–	–	–	–
29. Arid Karoo and Desert False Grassveld	–	–	–	–	–	–
30. Central Lower Karoo	–	–	–	–	–	–
31. Succulent Karoo	–	–	–	–	–	–
32. Orange River Broken Veld	–	–	–	–	–	–
33. Namaqualand Broken Veld	–	–	–	–	–	–
34. Strandveld of West Coast	60,1	–	–	–	60,1	0,95
					158,4	0,05

IVA False Karoo Types

Veld Type	Area km^2					
	Cape Prov.	Tvl.	O.F.S.	Natal	Total S.A.	% of Total S.A.
35. False Arid Karoo	12 617	–	–	–	12 617	1,1
36. False Upper Karoo	38 765	–	27 012	–	65 777	5,7
37. False Karroid Broken Veld	9 390	–	–	–	9 390	0,8
38. False Central Lower Karoo	1 348	–	–	–	1 348	0,1
39. False Succulent Karoo	10 739	–	–	–	10 739	0,9
40. False Orange River Broken Veld	5 442	–	199	–	5 641	0,5
41. Pan – Turf Veld invaded by Karoo	–	–	1 148	–	1 148	0,1
42. *Danthonia* Mountain Veld replaced by Karoo	2 023	–	–	–	2 023	0,2
43. Mountain Renosterbosveld	11 172	–	–	–	11 172	1,0
					119 855	10,0

Table 3 *(continued)*

	Provincial and National Parks Conservation Areas km²					
	Cape Prov.	Tvl.	O.F.S.	Natal	Total S.A.	% of Veld Type
35. False Arid Karoo	–	–	–	–	–	–
36. False Upper Karoo	77,80	–	± 230,00	–	307,80	0,5
37. False Karroid Broken Veld	65,33	–	–	–	65,33	0,7
38. False Central Lower Karoo	–	–	–	–	–	–
39. False Succulent Karoo	23	–	–	–	23	0,2
40. False Orange River Broken Veld	–	–	–	–	–	–
41. Pan – Turf Veld invaded by Karoo	–	–	–	–	–	–
42. *Danthonia* Mountain Veld replaced by Karoo	–	–	–	–	–	–
43. Mountain Renosterbosveld	–	–	–	–	–	–
					395,13	0,3

	Non-afforested Land in State Forest Reserves Area in km²					
	Cape Prov.	Tvl.	O.F.S.	Natal	Total S.A.	% of Veld Type
35. False Arid Karoo	–	–	–	–	–	–
36. False Upper Karoo	–	–	–	–	–	–
37. False Karroid Broken Veld	–	–	–	–	–	–
38. False Central Lower Karoo	–	–	–	–	–	–
39. False Succulent Karoo	–	–	–	–	–	–
40. False Orange River Broken Veld	–	–	–	–	–	–
41. Pan – Turf Veld invaded by Karoo	–	–	–	–	–	–
42. *Danthonia* Mountain Veld replaced by Karoo	–	–	–	–	–	–
43. Mountain Renosterbosveld	–	–	–	–	–	–

V Temperate and Transitional Forest and Scrub Types

Veld Type	Area km²					
	Cape Prov.	Tvl.	O.F.S.	Natal	Total S.A.	% of Total S.A.
44. Highland Sourveld and Dohne Sourveld	24 704	–	3 645	11 186	39 535	3,4

Table 3 *(continued)*

45. 'Ngongoni Veld of Natal Mist-belt	–	–	–	3 694	3 694	0,3
46. Coastal Renosterbosveld	14 591	–	–	–	14 591	1,3
47. Coastal Macchia	8 379	–	–	–	8 379	0,7
					66 199	4,0

	Provincial and National Parks Conservation Areas km^2					
	Cape Prov.	Tvl.	O.F.S.	Natal	Total S.A.	% of Total S.A.
44. Highland Sourveld and Dohne Sourveld	1,62	–	33,00	281,12	315,74	0,8
45. 'Ngongoni Veld of Natal Mist-belt	–	–	–	–	–	–
46. Coastal Renosterbosveld	49,16	–	–	–	49,15	0,4
47. Coastal Maccia	54,22	–	–	–	54,22	0,6
					419,11	0,6

	Non-afforested Land in State Forest Reserves Area km^2					
	Cape Prov.	Tvl.	O.F.S.	Natal	Total S.A.	% of Veld Type
44. Highland Sourveld and Dohne Sourveld	387,2	–	–	179,7	566,9	1,4
45. 'Ngongoni Veld of Natal Mist-belt	–	–	–	1,05	1,05	0,03
46. Coastal Renosterbosveld	76,4	–	–	–	76,4	0,5
47. Coastal Macchia	128,1	–	–	–	128,1	1,5
					772,5	1,2

VI Pure Grassveld Types

Veld Type	Area km^2					
	Cape Prov.	Tvl.	O.F.S.	Natal	Total S.A.	% of Total S.A.
48. *Cymbopogon – Themeda* Veld (sandy)	3 178	14 635	22 568	–	40 381	3,4
49. Transitional *Cymbopogon Themeda* Veld	–	–	14 080	–	14 080	1,2

Table 3 *(continued)*

50. Dry *Cymbopogon Themeda* Veld	3 612	13 900	25 864	–	43 376	3,7
51. Pan – Turf Veld of Western Free State	–	–	2 596	–	2 596	0,2
52. *Themeda* Veld (Turf Highveld)	–	10 911	–	–	10 911	0,9
53. *Themeda* Veld to *Cymbopogon – Themeda* Veld Transition	–	419	11 284	–	11 703	1,0
54. *Themeda* Veld to Highland Sourveld Transition	–	2 098	599	52	2 749	0,2
55. *Themeda* Veld to Bankenveld Transition	–	682	–	–	682	0,06
56. Highland Sourveld to *Cymbopogon – Themeda* Veld Transition	2 408	–	7 339	104	9 851	0,9
57. Northeastern Sandy Highveld	–	13 533	–	1 145	14 678	1,3
58. *Themeda – Festuca* Alpine Veld	6 934	–	299	989	8 222	0,7
59. Stormberg Plateau Sweet Veld	2 456	–	–	–	2 456	0,2
60. Karroid *Danthonia* Mountain Veld	14 254	–	–	–	14 254	1,2
					175 939	15,0

	Provincial and National Parks Conservation Areas km²					
	Cape Prov.	Tvl.	O.F.S.	Natal	Total S.A.	% of Veld Types
48. *Cymbopogon – Themeda* Veld (sandy)	–	–	–	–	–	–
49. Transitional *Cymbopogon – Themeda* Veld	–	–	111,34	–	111,34	0,8
50. Dry *Cymbopogon – Themeda* Veld	8,56	41,06	–	–	49,62	0,09
51. Pan – Turf Veld of Western Free State	–	–	–	–	–	–
52. *Themeda* Veld (Turf Highveld)	–	–	–	–	–	–
53. *Themeda* Veld to *Cymbopogon – Themeda* Veld Transition	–	–	–	–	–	–
54. *Themeda* Veld to Highland Sourveld Transition	–	–	–	–	–	–
55. *Themeda* Veld to Bankenveld Transition	–	–	–	–	–	–

Table 3 *(continued)*

56. Highland Sourveld to *Cymbopogon – Themeda* Veld Transition	–	–	11,00	–	11,00	0,1
57. North-Eastern Sandy Highveld	–	–	–	–	–	–
58. *Themeda – Festuca* Alpine Veld	–	–	–	141,90	141,90	1,7
59. Stormberg Plateau Sweet Veld	–	–	–	–	–	–
60. Karroid *Danthonia* Mountain Veld	–	–	–	–	–	–
					313,86	0,2

	Non-afforested Land in State Forest Reserves Area km^2					
	Cape Prov.	Tvl.	O.F.S.	Natal	Total S.A.	% of Veld Type
48. *Cymbopogon – Themeda* Veld (sandy)	–	–	–	–	–	–
49. Transitional *Cymbopogon – Themeda* Veld	–	–	–	–	–	–
50. Dry *Cymbopogon – Themeda* Veld	–	–	–	–	–	–
51. Pan – Turf Veld of Western Free State	–	–	–	–	–	–
52. *Themeda* Veld (Turf Highveld)	–	–	–	–	–	–
53. *Themeda* Veld to *Cymbopogon – Themeda* Veld Transition	–	–	–	–	–	–
54. *Themeda* Veld to Highveld Sourveld Transition	–	–	–	–	–	–
55. *Themeda* Veld to Bankenveld Transition	–	–	–	–	–	–
56. Highveld Sourveld to *Cymbopogon – Themeda* Veld Transition	–	–	–	–	–	–
57. Northeastern Sandy Highveld	–	42,5	–	–	42,5	0,3
58. *Themeda – Festuca* Alpine Veld	–	–	–	1 637,7	1 637,7	19,9
59. Stormberg Plateau Sweet Veld	–	–	–	–	–	–
60. Karroid *Danthonia* Mountain Veld	–	–	–	–	–	–
					1 680,2	0,95

Table 3 *(continued)*

VIA False Grassveld Types

Veld Type	Area km²					
	Cape Prov.	Tvl.	O.F.S.	Natal	Total S.A.	% of Total S.A.
61. Bankenveld	–	22 919	649	–	23 568	2,0
62. Bankenveld to Sour Sandveld Transition	–	1 154	–	–	1 154	0,1
63. Piet Retief Sourveld	–	6 137	–	1 457	7 594	0,7
64. Northern Tall Grassveld (Transition between 63 & 68)	–	–	–	4 475	4 475	0,4
65. Southern Tall Grassveld	2 600	–	100	11 551	14 251	1,2
66. Natal Sour Sandveld	–	–	–	5 463	5 463	0,5
67. Pietersburg Plateau Grassveld	–	2 413	–	–	2 413	0,2
68. Eastern Province Grassveld	600	–	–	–	600	0,05
					59 518	5,0

	Provincial and National Parks Conservation Areas km²					
	Cape Prov.	Tvl.	O.F.S.	Natal	Total S.A.	% of Veld Types
61. Bankenveld	–	–	–	–	–	–
62. Bankenveld to Sour Sandveld Transition	–	–	–	–	–	–
63. Piet Retief Sourveld	–	–	–	–	–	–
64. Northern Tall Grassveld (Transition between 63&68)	–	–	–	–	–	–
65. Southern Tall Grassveld	–	–	–	14,38	14,38	0,1
66. Natal Sour Sandveld	–	–	–	–	–	–
67. Pietersburg Plateau Grassveld	–	–	–	–	–	–
68. Eastern Province Grassveld	–	–	–	–	–	–
					14,38	0,02

	Non-afforested Land in State Forest Reserves Area km²					
	Cape Prov.	Tvl.	O.F.S.	Natal	Total S.A.	% of Veld Types
61. Bankenveld	–	3,5	–	–	3,5	0,01

Table 3 *(continued)*

62. Bankenveld to Sour Sandveld Transition	–	–	–	–	–	–
63. Piet Retief Sourveld	–	–	–	–	–	–
64. Northern Tall Grassveld (Transition between 63 & 68)	–	–	–	–	–	–
65. Southern Tall Grassveld	–	–	–	–	–	–
66. Natal Sour Sandveld	–	–	–	–	–	–
67. Pietersburg Plateau Grassveld	–	–	–	–	–	–
68. Eastern Province Grassveld	–	–	–	–	–	–
					3,5	0,01

VII Sclerophyllous Bush Types

Veld Type	Area km²					
	Cape Prov.	Tvl.	O.F.S.	Natal	Total S.A.	% of Total S.A.
69. Macchia (Fynbos)	17 866	–	–	–	17 846	2,0
					17 846	2,0
	Provincial and National Parks Conservation Areas km²					
	Cape Prov.	Tvl.	O.F.S.	Natal	Total S.A.	% of Veld Types
69. Macchia (Fynbos)	139,09	–	–	–	139,09	0,8
					139,09	0,8
	Non-afforested Land in State Forest Reserves Area km²					
	Cape Prov.	Tvl.	O.F.S.	Natal.	Total S.A.	% of Veld Types
69. Macchia (Fynbos)	2587,2	–	–	–	2587,2	14,5
					2 587,2	14,5

VIIA False Sclerophyllous Bush Types

Veld Type	Area km²					
	Cape Prov.	Tvl.	O.F.S.	Natal	Total S.A.	% of Total S.A.
70. False Macchia	17 866	–	–	–	17 866	2,0
					17 866	2,0

	Provincial and National Parks Conservation Areas km²					
	Cape Prov.	Tvl.	O.F.S.	Natal	Total S.A.	% of Veld Type
70. False Macchia	0,57	–	–	–	0,57	0,003
					0,57	0,003

	Non-afforested Land in State Forest Reserves Area km²					
	Cape Prov.	Tvl.	O.F.S.	Natal	Total S.A.	% of Veld Type
70. False Macchia	3761,0	–	–	–	3761,0	21,1
					3761,0	21,1

Table 4

Total percentage of area (in classes) of each veld type under conservation by national and provincial conservation agencies and by non-afforested state forest lands

40% – 50% of Veld Type under Conservation at present

4. Knysna Forest

20% – 30% of Veld Type under Conservation at present

2. Alexandria Forest
10. Lowveld
15. Mopani Veld
58. *Themeda-Festuca* Alpine Veld
70. False Macchia

10% – 20% of Veld Type under Conservation at present

11. Arid Lowveld
69. Macchia

5% – 10% of Veld Type under Conservation at present

1. Coastal Forest and Thornveld
8. Northeastern Mountain Sourveld
9. Lowveld Sour Bushveld
16. Kalahari Thornveld and Shrub Bushveld

1% – 5% of Veld Type under Conservation at present

3. Pondoland Coastal Plateau Sourveld
5. 'Ngongoni Veld
6. Zululand Thornveld
34. Strandveld of West Coast
44. Highland Sourveld and Dohne Sourveld
47. Coastal Macchia

0% – 0,9% of Veld Type under Conservation at present

7. Eastern Province Thornveld
12. Springbok Flats Turf Thornveld
13. Other Turf Thornveld
14. Arid Sweet Bushveld
17. Kalahari Thornveld invaded by Karoo
18. Mixed Bushveld
19. Sourish Mixed Bushveld
20. Sour Bushveld
21. False Thornveld of Eastern Province
22. Invasion ot Grassveld by *Acacia karroo*
23. Valley Bushveld
24. Noorsveld
25. Succulent Mountain Scrub
26. Karroid Broken Veld

27. Central Upper Karoo
28. Western Mountain Karoo
29. Arid Karoo and Desert False Grassveld
30. Central Lower Karoo
31. Succulent Karoo
32. Orange River Broken Veld
33. Namaqualand Broken Veld
35. False Arid Karoo
36. False Upper Karoo
37. False Karroid Broken Veld
38. False Central Lower Karoo
39. False Succulent Karoo
40. False Orange River Broken Veld
41. Pan – Turf Veld invaded by Karoo
42. *Danthonia* Mountain Veld replaced by Karoo
43. Mountain Renosterbosveld
45. 'Ngongoni Veld of Natal Mist-belt
46. Coastal Renosterbosveld
48. *Cymbopogon – Themeda* Veld (sandy)
49. Transitional *Cymbopogon – Themeda* Veld
50. Dry *Cymbopogon – Themeda* Veld
51. Pan – Turf Veld of Western Free State
52. *Themeda* Veld (Turf Highveld)
53. *Themeda* Veld to *Cymbopogon – Themeda* Veld Transition
54. *Themeda* Veld to Highland Sourveld Transition
55. *Themeda* Veld to Bankenveld Transition
56. Highland Sourveld to *Cymbopogon – Themeda* Veld Transition
57. North-Eastern Sandy Highveld
59. Stormberg Plateau Sweet Veld
60. Karroid *Danthonia* Mountain Veld
61. Bankenveld
62. Bankenveld to Sour Sandveld Transition
63. Piet Retief Sourveld
64. Northern Tall Grassveld (Transition between 63 and 65)
65. Southern Tall Grassveld
66. Natal Sour Sandveld
67. Pietersburg Plateau Grassveld
68. Eastern Province Grassveld