# 94. Mauchesburg Alpine Grasslande (MP 7)

Reference number MP 7

Listed under Criterion F

Blome Grassland and Forest

Province Mpumalanga

Municipality Thaba Chweu LM

Original area of ecosystem 42 000 ha

Remaining natural area of ecosystem (%) 84%

Proportion of ecosystem protected 46% of original area

Known number of species of special concern 48 threatened or endemic plant and animal

species including those listed below

#### Geographical location

Long Tom Pass escarpment (2430DC, 2530BA and 2530BB). High altitude grasslands occurring on the second and higher escarpment (two escarpments up from the Lowveld) on the Pretoria Group geological formation. Landtypes and species distributions used to delineate ecosystem boundaries.

#### Description

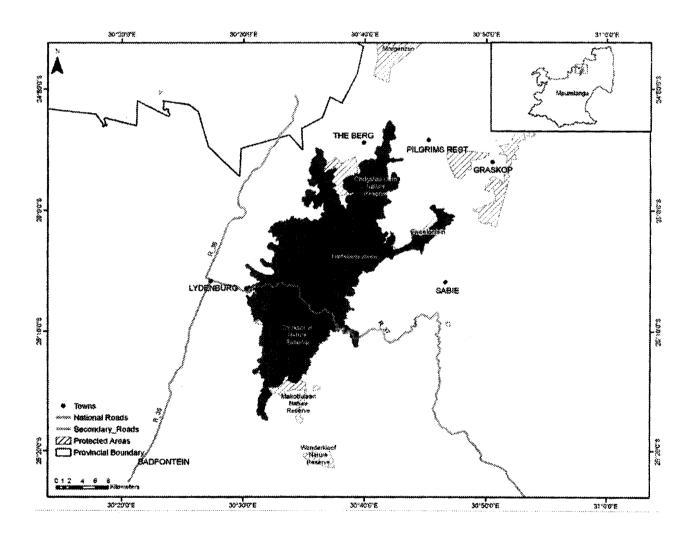
Key biodiversity features include three mammal species including Rough-haired Golden Mole, Meester's Golden Mole and Oribi; five bird species including Blue Swallow, Blue Crane, Grey Crowned Crane, Striped Flufftail and Wattled Crane; one amphibian, *Bufo gariepensis nubicolus*; two reptile species including *Bradypodion transvaalense* and *Lamprophis swazicus*; thirty-seven plant species for example *Aloe modesta*, *Gladiolus appendiculatus*, *Hesperantha saxicola*, *Ledebouria mokobulaanensis* and *Moraea robusta*; and four vegetation types including Long Tom Pass Montane Grassland, Lydenburg Thornveld, Northern Escarpment Dolomite Grassland and Mpumalanga Afromontane Forest. The ecosystem includes part of the Lydenburg Centre of Plant Endemism; it includes important sub-catchments, provides an escarpment corridor; and is important for grassland and forest processes.

#### Other information

Approximately 46% of the ecosystem is protected in the Gustav Klingbiel Nature Reserve, Hartebeesvlakte Primary Conservation Area, Makobulaan Nature Reserve, Mount Anderson Catchment Nature Reserve, Mount Anderson Nature Reserve, Ohrigstad Dam Nature Reserve, Sterkspruit Nature Reserve and Tweefontein Primary Conservation Area.

#### Reference

Mpumalanga Tourism and Parks Agency & Department of Agriculture and Land Administration. 2007. Mpumalanga Biodiversity Conservation Handbook.



Location of Mauchesburg Alpine Grasslands showing original area of ecosystem

## 95. Mossel Bay Shale Renosterveld (FRs 14)

Reference number FRs 14

Listed under Criterion A1

Biome Fynbos

Province Western Cape

Municipalities Hessequa LM and Mossel Bay LM

Original area of ecosystem 80 000 ha

Remaining natural area of ecosystem (%) 41%

Proportion of ecosystem protected 0% of original area

Known number of species of special concern 21 Red Data plant species (EX, EW, CR, EN &

VU excl VU D2) and 10 endemic plant species

#### **Geographical location**

Coastal plains and valleys from the Kruisrivier near Riversdale to Botterberg, west of the Robinson Pass, centred on the Gouritz River and bordered by mountains (Langeberg, Outeniqua) to the north and the N2 road to the south, except for a few small patches further south (south of Cooper).

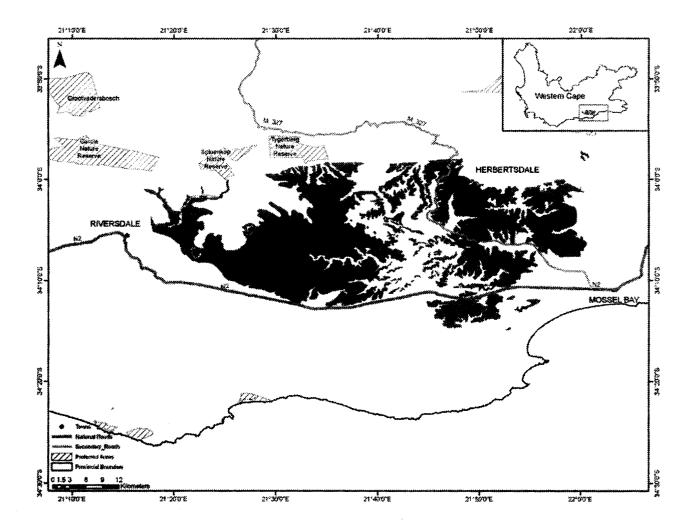
## Description

Undulating hills and tablelands, steeply dissected by rivers. The vegetation of the area is mainly a medium dense, medium tall cupressoid-leaved shrubland dominated by renosterbos, dotted by sparse, tall shrubs. Thicket patches and thicket elements are common, possibly because the landscape is more rugged than in the case of the Rûens shale renosterveld ecosystems, and therefore less prone to fire. Fire-safe habitats, such as steep slopes, gullies and termitaria have thicket clumps, dominated by *Euclea undulata*, *Putterlickia pyracantha* and *Rhus lucida*. Steep north-facing slopes have succulent thicket elements. The southern reaches may be covered with a calcrete layer bearing South Coast limestone fynbos elements. At least 10 endemic plant species and 21 Red Data List plant species occur in the ecosystem.

#### Other information

The ecosystem is not protected, however small patches are found in Langeberg-oos mountain catchment area.

Rebelo, A.G., Boucher, C., Helme, N., Mucina, L., & Rutherford, M.C. *et al.* 2006. Fynbos Biome. In: L. Mucina & M.C. Rutherford (eds). The Vegetation of South Africa, Lesotho and Swaziland. *Strelitzia* 19: 186. South African National Biodiversity Institute, Pretoria.



Location of Mossel Bay Shale Renosterveld showing original area of ecosystem

# 96. Mount Thesiger Forest Complex (FOR 5)

Reference number FOR 5

Listed under Criterion F

Biome Forest

Province Eastern Cape

Municipality Port St Johns LM

Original area of ecosystem Data not available

Remaining natural area of ecosystem 500 ha

Proportion of ecosystem protected 10% of remaining area

Known number of species of special concern

#### Geographical location

Forest complex adjoining Port St Johns in the Matiwane District around Mount Thesiger, north and south of the Mzimvubu River in Eastern Cape (3129DA). The ecosystem includes the following forest patches: 8721, 8722, 8723, 8724, 8725, 8726, 8727, 8728, 8729, 8730, 8731, 8732, 8733, 8734, 8735, 8736, 8768, 8774, 8797, 8920, 8921, 8943, 8944, 8945, 8946, 8947, 8951, 8952, 8984, 8986, 9000, 9001, 9002, 9003, 9004, 9005, 9006, 9032, 9033, 9034, 9035, 9036, 9037, 9038, 9095, 9096, 9097, 9189, 9190, 9191, 9192, 9193, 9194, 9195, 9214, 9215, 9251, 9285, 9289, 9290, 9291, 9292, 9293, 9294, 9295, 9296, 9297, 9306, 9307, 9308, 9314, 9315, 9317, 9318, 9319, 9321, 9322, 9327, 9332, 9350, 17996, 17997, 18000, 18016, 18017, 18021, 18028, 18035, 18037, 18044, 18045, 18047, 18048, 18049, 18056, 18059 and 18068.

#### Description

The ecosystem falls within the Transkei Coastal Scarp Forest. This forest complex is among the most diverse in terms of woody plant species with 137 species recorded. Mount Thesiger is also diverse in orchids with 32 orchid species recorded. The socio-economic value of the ecosystem is also high.

### Other information

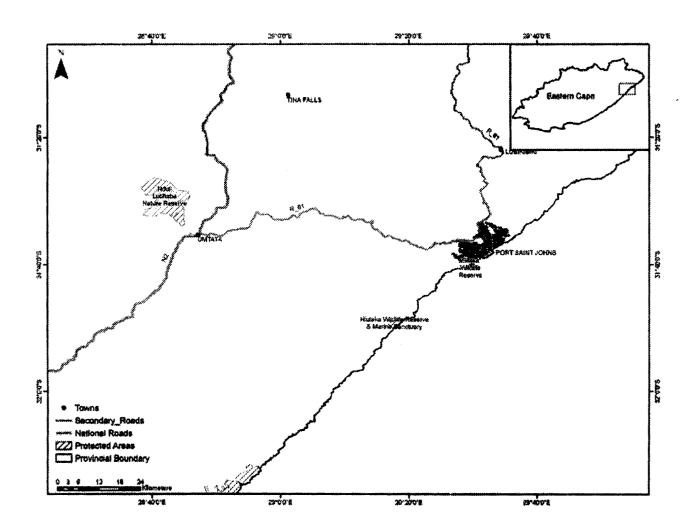
Approximately 10% of the ecosystem is protected and about half of the ecosystem falls in a State forest.

Berliner, D., van der Merwe, I.J., Benn, D. & Rouget, M. 2006. Systematic conservation planning for the Forest Biome of South Africa: Approach, methods and results used for the selection of priority forests. Unpublished Report for the Department of Water Affairs and Forestry.

Cawe, S. G. & Geldenhuys, C.G. 2007. Resource status and population dynamics of target species in natural forests of the Port St Johns Forest Estate: A basis for sustainable resource use. Report for the Department of Water Affairs and Forestry.

Department of Water Affairs and Forestry. National Forest Inventory.

Von Maltitz, G., Mucina. L., Geldenhuys, C., Lawes, M., Eeley, H., Adie, H., Vink, D., Flemming, G. & Bailey, C. 2003. Classification System for South African Indigenous Forests. An objective classification for the Department of Water Affairs and Forestry. Environmentek report ENV-P-C 2003-017, CSIR, Pretoria.



**Location of Mount Thesiger Forest Complex** 

### 97. Ngome Mistbelt Grassland and Forest (KZN 31)

Reference number KZN 31

Listed under Criterion F

Biome Savanna, Grassland and Forest

Province KwaZulu-Natal

Municipality Abaqulusi LM

Original area of ecosystem 24 000 ha

Remaining natural area of ecosystem (%) 45%

Proportion of ecosystem protected 0% of original area

Known number of species of special concern 9 threatened or endemic plant and animal

species including those listed below

## Geographical location

Gluckstadt (2731CC) and Ngome (2731CD). Ecosystem delineated by the Northern Zululand Mistbelt Grassland and the Low Escarpment Mistbelt Forest.

#### Description

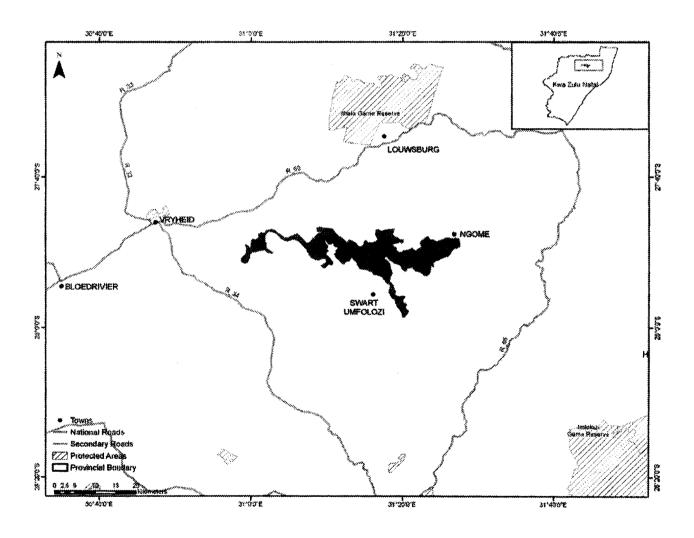
Key biodiversity features include one bird species, the Blue Swallow; six millipede species including *Centrobolus decoratus*, *Centrobolus rubricollis*, *Doratogonus avius*, *Doratogonus hoffmani*, *Doratogonus montanus*, *Doratogonus natalensis*; two plant species including *Brachystelma ngomense* and *Helichrysum ingomense*; and five vegetation types including Northern KwaZulu-Natal Moist Grassland, Low Escarpment Mistbelt Forest, Northern Zululand Mistbelt Grassland, Northern Zululand Sourveld and Paulpietersburg Moist Grassland. The forest portion of the ecosystem consists of a tall layered forest of between 15 – 25m with a canopy layer dominated by *Syzygium gerrardii*; a well-developed seedling and sapling stratum and understory tree stratum; and a well-developed herb layer in the wet parts of the forest. Eighty-six tree and shrub species and 19 epiphytic orchid species have been recorded.

#### Other information

The ecosystem is not protected.

Berliner, D., van der Merwe, I.J., Benn, D. & Rouget, M. 2006. Systematic conservation planning for the Forest Biome of South Africa: Approach, methods and results used for the selection of priority forests. Unpublished Report for the Department of Water Affairs and Forestry. Goodman, P.S. 2007. KwaZulu-Natal Terrestrial Conservation Plan (C-Plan), Version 4. Biodiversity Conservation Planning Division, Ezemvelo KZN Wildlife.

Von Maltitz, G., Mucina. L., Geldenhuys, C., Lawes, M., Eeley, H., Adie, H., Vink, D., Flemming, G. & Bailey, C. 2003. Classification System for South African Indigenous Forests. An objective classification for the Department of Water Affairs and Forestry. Environmentek report ENV-P-C 2003-017, CSIR, Pretoria.



Location of Ngome Mistbelt Grassland and Forest showing original area of ecosystem

# 98. Noordkaap Greenstone Bushveld (MP 8)

Reference number MP 8

Listed under Criterion F

Biome Savanna

Province Mpumalanga

Municipalities Mbombela LM and Umjindi LM

Original area of ecosystem 4 000 ha

Remaining natural area of ecosystem (%) 98%

Proportion of ecosystem protected 23% of original area

Known number of species of special concern 10 threatened or endemic plant or animal

species including those listed below

### Geographical location

Hills between Noordkaap settlement and Barberton Nature Reserve (2531DB and 2531CA). Hilly terrain comprised of ultramafic rocks and greenstone. Landtypes, serpentine outcrops and serpentine endemic plant species used to delineate the ecosystem.

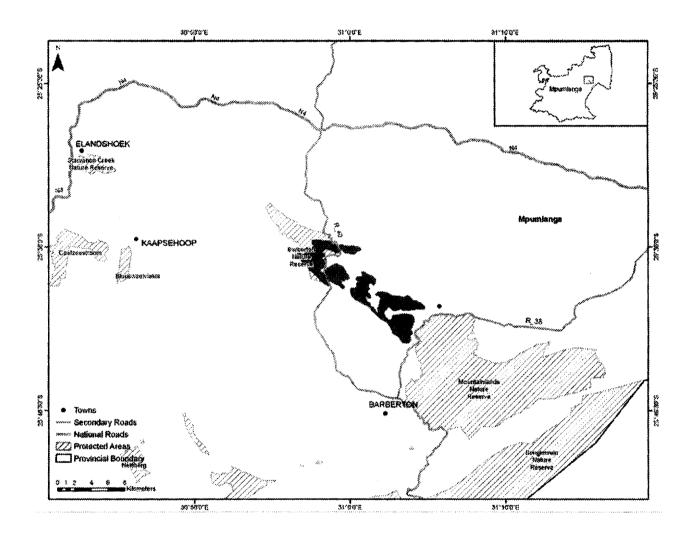
#### Description

Key biodiversity features include two butterfly species including Lepidochrysops swanepoeli and Lepidochrysops jefferyi; three bird species including Saddle-backed Stork, Southern Ground Hornbill and Striped Flufftail; three reptile species including Aspedilaps scutatus intermedius, Cordylus warreni barbertonensis and Platysaurus wilhelmi; two plant species including Gladiolus serpenticola and Protea curvata; and three vegetation types including Barberton Serpentine Sourveld, Granite Lowveld and Legogote Sour Bushveld. The ecosystem includes part of the Barberton Centre of Endemism.

#### Other information

Approximately 23% of the ecosystem is protected in the Barberton Nature Reserve.

Mpumalanga Tourism and Parks Agency & Department of Agriculture and Land Administration. 2007. Mpumalanga Biodiversity Conservation Handbook.



Location of Noordkaap Greenstone Bushveld showing original area of ecosystem

## 99. Ntimbankulu Forest (FOR 6)

Reference number FOR 6

Listed under Criterion F

Biome Forest

Province KwaZulu-Natal

Municipality Umzumbe LM

Original area of ecosystem Data not available

Remaining natural area of ecosystem 500 ha

Proportion of ecosystem protected 0% of remaining area

Known number of species of special concern 2 Red Data mammal species and 10 rare and

endemic plant species

# **Geographical location**

Near Port Shepston in southern KwaZulu-Natal (3030CB).

### Description

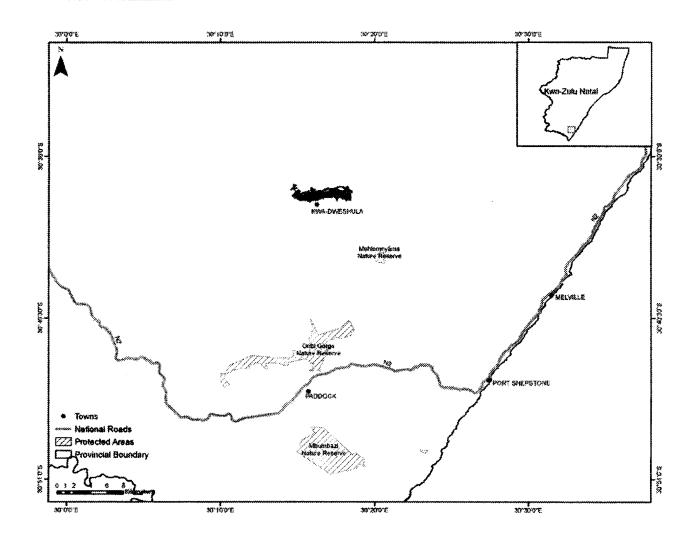
This ecosystem falls within the Eastern Scarp Forest. High forest with distinct strata, relatively open under the canopy. Ecosystem has relatively high biodiversity with more than 120 woody plant species and ten rare and endemic plant species for example *Rhus rudatisii* and *Stachys rudatisii*. Two Red Data mammal species occur in the ecosystem.

#### Reference

Berliner, D., van der Merwe, I.J., Benn, D. & Rouget, M. 2006. Systematic conservation planning for the Forest Biome of South Africa: Approach, methods and results used for the selection of priority forests. Unpublished Report for the Department of Water Affairs and Forestry.

Department of Water Affairs and Forestry. National Forest Inventory.

Von Maltitz, G., Mucina. L., Geldenhuys, C., Lawes, M., Eeley, H., Adie, H., Vink, D., Flemming, G. & Bailey, C. 2003. Classification System for South African Indigenous Forests. An objective classification for the Department of Water Affairs and Forestry. Environmentek report ENV-P-C 2003-017, CSIR, Pretoria.



**Location of Ntimbankulu Forest** 

## 100. Ntunjambili Valley Complex (KZN 32)

Reference number KZN 32

Listed under Criterion F

Biome Savanna and Grassland

Province KwaZulu-Natal

Municipalities Umvoti LM and Maphumulo LM

Original area of ecosystem 900 ha

Remaining natural area of ecosystem (%) 53%

Proportion of ecosystem protected 0% of original area

Known number of species of special concern 4 threatened or endemic plant and animal

species including those listed below

## **Geographical location**

Kranskop (2830DD). Ecosystem delineated by the upper reaches of the valleys containing scarp forest.

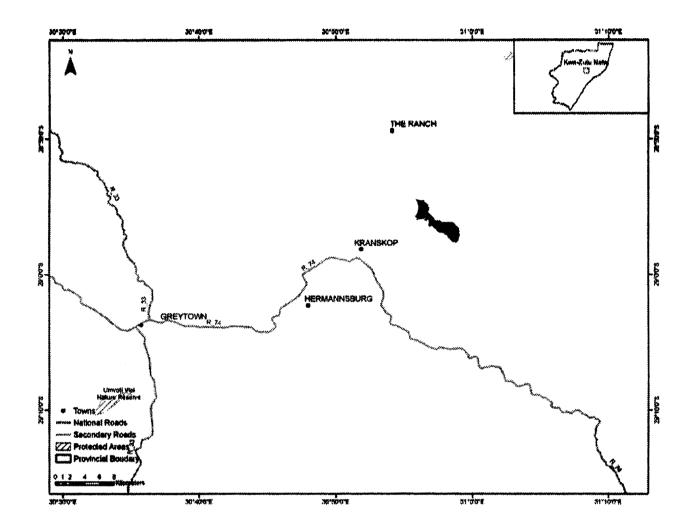
# Description

Key biodiversity features include three millipede species including *Allawrencius complex*, *Centrobolus fulgidus*, and *Doratogonus natalensis*; one plant species including *Senecio exuberans*; and three vegetation types including Eastern Scarp Forest, Eastern Valley Bushveld, Midlands Mistbelt Grassland.

#### Other information

The ecosystem is not protected.

#### Reference



Location of Ntunjambili Valley Complex showing original area of ecosystem

#### 101. Oribi-Port Edward Pondoland-Ugu Sourveld (KZN 33)

Reference number KZN 33

Listed under Criterion F

Biome Indian Ocean Coastal Belt, Savanna and

**Forest** 

Province KwaZulu-Natal

Municipalities Ezingoleni LM and Hibiscus Coast LM

Original area of ecosystem 41 000 ha

Remaining natural area of ecosystem (%) 29%

Proportion of ecosystem protected 12% of original area

Known number of species of special concern 23 threatened or endemic plant and animal

species including those listed below

#### Geographical location

St. Faith's (3030CA), Port Shepstone (3030CB), Izingolweni (3030CC), Margate (3030CD), Port Edward (3130AA). Ecosystem delineated by the boundaries of Pondoland-Ugu Sandstone Coastal Sourveld. Western boundary further refined using the Mtamvuna River, whilst eastern boundary delineated by the Interior South Coast Grasslands threatened ecosystem (KZN 7).

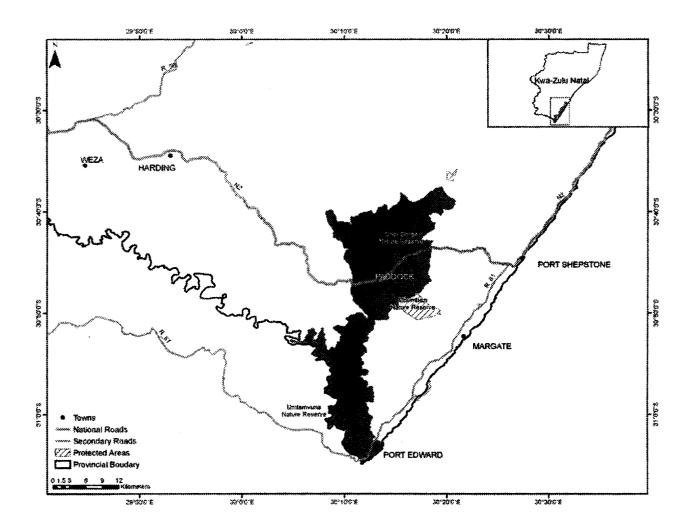
#### Description

Key biodiversity features include one mammal species, Oribi; two millipede species including Doratogonus infragilis and Doratogonus montanus; eighteen plant species for example Catha abbotti, Crassula streyi, Craterostigma nanum var nanum, Dahlgrenoden natalense, Diaphananthe millarii, Eugenia simii, Huernia hystrix parvula, Kniphofia rooperi, Phylica natalensis, Plectranthus ernstii, Pseudosalacia streyi, Rhynchocalyx lawsoniodes, Streptocarpus primulifolius, Watsonia confusa and Watsonia inclinata; two reptile species including Bradypodion angustiarum and Bradypodion wezae; and six vegetation types including Ngongoni Veld, Eastern Valley Bushveld, KwaZulu-Natal Coastal Forest, Pondoland Scarp Forest, Pondoland-Ugu Sandstone Coastal Sourveld and KwaZulu-Natal Coastal Belt.

### Other information

Approximately 12% of the ecosystem is protected in the Oribi Gorge Nature Reserve, Mbumbazi Nature Reserve and Umtamvuna Nature Reserve.

#### Reference



Location of Oribi-Port Edward Pondoland-Ugu Sourveid showing original area of ecosystem

### 102. Peninsula Sandstone Fynbos (FFs 9)

Reference number FFs 9

Listed under Criterion D1

Blome Fynbos

Province Western Cape

Municipality City of Cape Town MM

Original area of ecosystem 23 000 ha

Remaining natural area of ecosystem (%) 91%

Proportion of ecosystem protected 90% of original area

Known number of species of special concern 66 Red Data plant species (EX, EW, CR, EN &

VU excl VU D2) and 140 endemic plant

species

#### Geographical location

Confined to the Cape Peninsula, from the top of Lion's Head and Table Mountain (Cape Town) to Cape Point and Cape of Good Hope and Including Constantiaberg and Swartkopsberge.

## Description

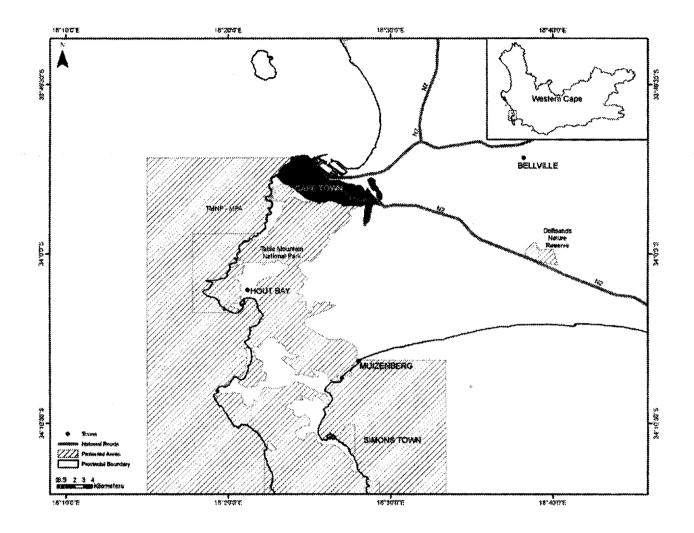
Gentle to steep slopes, with cliffs in the north, over a 50 km long peninsula. Vegetation is a medium dense, tall proteoid shrubland over a dense moderately tall, ericoid-leaved shrubland; mainly proteoid, ericaceous and restioid fynbos, with some asteraceous fynbos. At least 140 endemic plant species and 66 Red Data List plant species occur in the ecosystem.

### Other information

Approximately 90% of the ecosystem is protected in the Table Mountain National Park.

#### Reference

Rebelo, A.G., Boucher, C., Helme, N., Mucina, L., & Rutherford, M.C. *et al.* 2006. Fynbos Biome. In: L. Mucina & M.C. Rutherford (eds). The Vegetation of South Africa, Lesotho and Swaziland. *Strelitzla* 19: 107-108. South African National Biodiversity Institute, Pretoria.



Location of Peninsula Sandstone Fynbos showing original area of ecosystem

### 103. Pietermaritzburg South (KZN 34)

Reference number KZN 34

Listed under Criterion F

Biome Savanna, Grassland and Forest

Province KwaZulu-Natal

Municipalities The Msunduzi LM, Richmond LM and Ingwe

LM

Original area of ecosystem 23 000 ha

Remaining natural area of ecosystem (%) 37%

Proportion of ecosystem protected 0% of original area

Known number of species of special concern 19 threatened or endemic plant and animal

species including those listed below

#### Geographical location

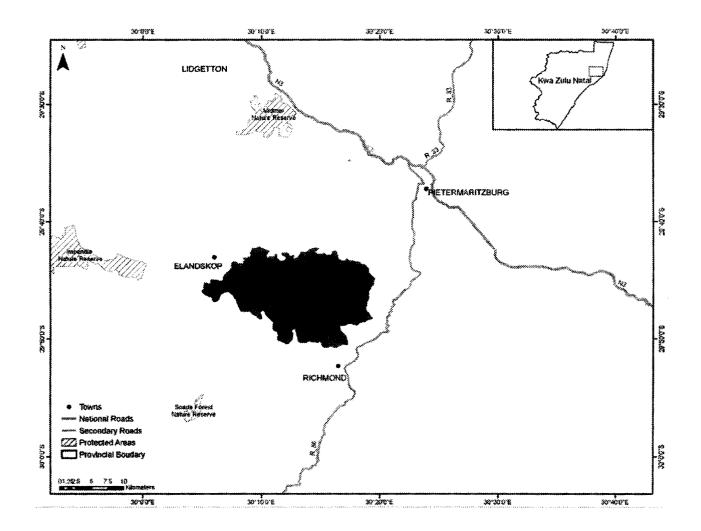
Byrne (2930CC). Ecosystem delineated by prominent plateau, river and ridge features. Southern and eastern boundaries delineated by the contours located at the base of the prominent mountains within the region. Northern boundary delineated by the contours along the crest on the mountains; and western boundary delineated by a river channel.

#### Description

Key biodiversity features include two amphibian species, inlcuding *Arthroleptella ngongoniensis* and *Leptopelis xenodactylus*; one bird species, the Blue Swallow; one mammal species, the Oribi; eight millipede species including *Centrobolus decoratus*, *Centrobolus lawrencei*, *Centrobolus tricolor*, *Doratogonus avius*, *Doratogonus cristulatus*, *Doratogonus hoffmani*, *Doratogonus montanus* and *Doratogonus natalensis*; six plant species including *Dierama reynoldsii*, *Geranium natalense*, *Gerbera aurantiaca*, *Hesperantha woodii*, *Plectranthus rehmannii* and *Senecio exuberans*; one reptile species, *Bradypodion bourquini*; and four vegetation types including Drakensberg Foothill Moist Grassland, Eastern Mistbelt Forest, Midlands Mistbelt Grassland and Ngongoni Veld.

#### Other information

The ecosystem is not protected.



Location of Pletermaritzburg South showing original area of ecosystem

## 104. Potberg Ferricrete Fynbos (FFf 2)

Reference number FFf 2

Listed under Criterion A1

Biome Fynbos

Province Western Cape

Municipalities Swellendam LM and WCDMA03

Original area of ecosystem 4 000 ha

Remaining natural area of ecosystem (%) 55%

Proportion of ecosystem protected 6% of original area

Known number of species of special concern 17 Red Data plant species (EX, EW, CR, EN &

VU excl VU D2) and 1 endemic plant species

# **Geographical location**

Northern and western lowermost slopes of Potberg Mountain from Potberg to Poortsrivier and bordered on the north by the Breede River from Diepkloof eastwards.

### Description

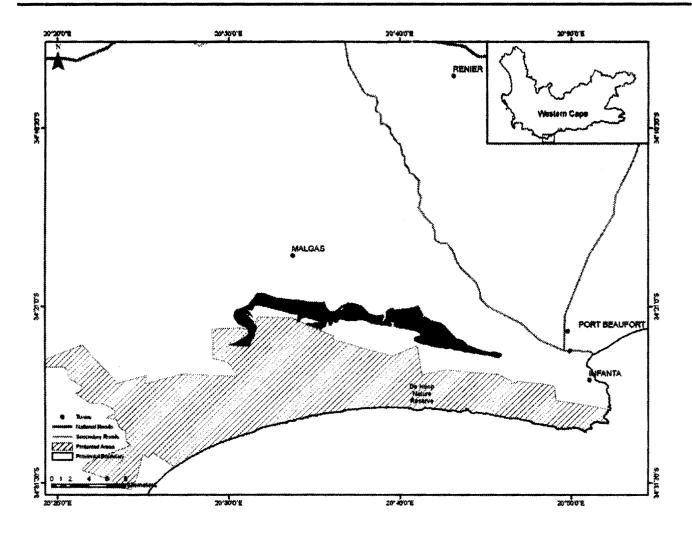
Slight slopes and moderately undulating plains perched on the northern slopes below Potberg. A medium tall evergreen shrubland. Asteraceous and proteoid fynbos are dominant, with localised stands of restioid fynbos. At least one endemic plant species and 17 Red Data List plant species occur in the ecosystem.

#### Other information

Approximately 6% of the ecosystem is protected in De Hoop Nature Reserve.

#### Reference

Rebelo, A.G., Boucher, C., Helme, N., Mucina, L., & Rutherford, M.C. *et al.* 2006. Fynbos Biome. In: L. Mucina & M.C. Rutherford (eds). The Vegetation of South Africa, Lesotho and Swaziland. *Strelitzia* **19**: 160. South African National Biodiversity Institute, Pretoria.



Location of Potberg Ferricrete Fynbos showing original area of ecosystem

### 105. Qudeni Mountain Mistbelt Forest and Grassland (KZN 35)

Reference number KZN 35

Listed under Criterion F

Biome Grassland, Forest and Savanna

Province KwaZulu-Natal

Municipalities Nguthu LM and Nkandla LM

Original area of ecosystem 4000 ha

Remaining natural area of ecosystem (%) 70%

Proportion of ecosystem protected 0% of original area

Known number of species of special concern 6 threatened or endemic plant and animal

species including those listed below

#### Geographical location

Collessie (2830DA) and Qudeni (2830DB). Ecosystem lies to the west of the Qudeni Forest Reserve and includes the mistbelt grasslands and forests on Qudeni Mountain. Ecosystem delineated topographically.

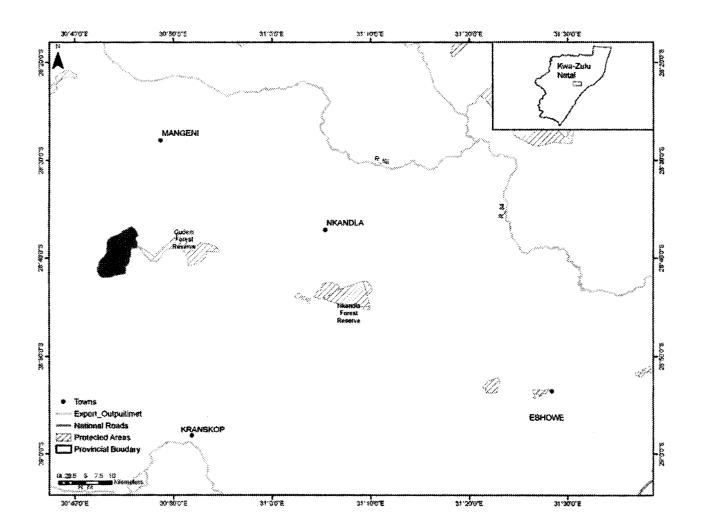
### Description

Key biodiversity features include three millipede species, *Allawrencius nodulosus*, *Allawrencius triordinatus* and *Doratogonus natalensis*; one plant species, *Acalypha entumenica*; two reptile species including *Bradypodion nemorale* and *Bradypodion tilburyi*; and five vegetation types Eastern Mistbelt Forest, Midlands Mistbelt Grassland, Ngongoni Veld, Northern KwaZulu-Natal Moist Grassland and Thukela Valley Bushveld.

#### Other information

The ecosystem is not protected.

#### Reference



Location of Qudeni Mountain Mistbelt Forest and Grassland showing original area of ecosystem

## 106. Saldanha Granite Strandveid (FS 2)

Reference number FS 2

Listed under Criterion A1

Blome Fynbos

Province Western Cape

Municipalities Saldanha Bay LM and WCDMA01

Original area of ecosystem 23 000 ha

Remaining natural area of ecosystem (%) 37%

Proportion of ecosystem protected 10% of original area

Known number of species of special concern 45 Red Data plant species (EX, EW, CR, EN &

VU excl VU D2) and 15 endemic plant species

## Geographical location

On the West Coast, granite domes from Vredenburg to St Helena Bay and many points along the coast including Paternoster and Saldanha's North Head; also around Langebaan town and at Postberg on the Langebaan Peninsula.

#### Description

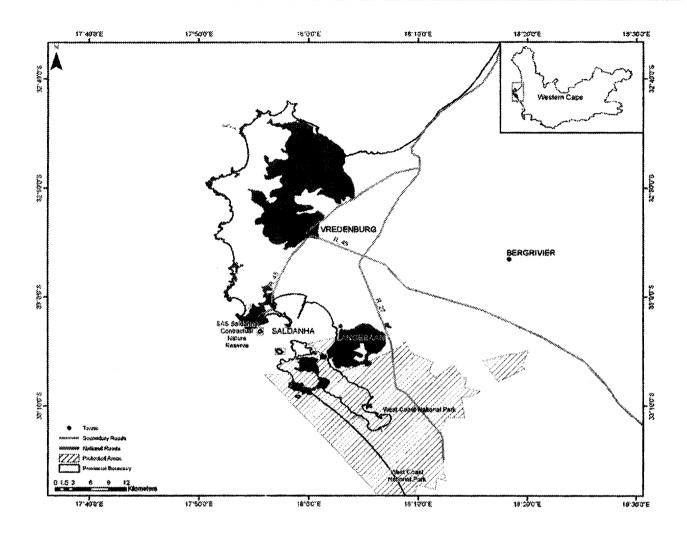
Rounded forms of granite sheets and smooth forms at their feet dominate the landscapes of this ecosystem. Low to medium shrubland, containing some succulent elements, alternates with grassy and herb-rich spots supporting a rich geophyte flora. At least 15 endemic plant species and 45 Red Data List plant species occur in the ecosystem.

#### Other Information

Approximately 10% of the ecosystem is protected in the West Coast National Park, SAS Saldanha and Columbine Nature Reserves, and a small portion is found in private reserves such as West Point, Groot Paternoster and Swartriet.

#### Reference

Rebelo, A.G., Boucher, C., Helme, N., Mucina, L., & Rutherford, M.C. *et al.* 2006. Fynbos Biome. In: L. Mucina & M.C. Rutherford (eds). The Vegetation of South Africa, Lesotho and Swaziland. *Strelitzia* 19: 199. South African National Biodiversity Institute, Pretoria.



Location of Saldanha Granite Strandveld showing original area of ecosystem

### 107. Sekhukhune Mountainlands (MP 9)

Reference number MP 9

Listed under Criterion F

Biome Grassland and Savanna

Provinces Mpumalanga and Limpopo

Municipalities Highlands LM, Thaba Chweu LM, Greater

Groblersdal LM, and Greater Tubatse LM

Original area of ecosystem 121 000 ha

Remaining natural area of ecosystem (%) 94%

Proportion of ecosystem protected 0% of original area

Known number of species of special concern 29 threatened or endemic plant and animal

species including those listed below

#### Geographical location

Between Roossenekal, Die Berg, and towards Steelpoort (2429DD, 2430CC, 2430CD, 2529BB, 2530AA, 2529BD and 2530AC). High-lying norite mountainlands occurring in Sekhukhuneland Centre of Endemism. Landtypes, altitude and species distribution ranges delineate the ecosystem boundary.

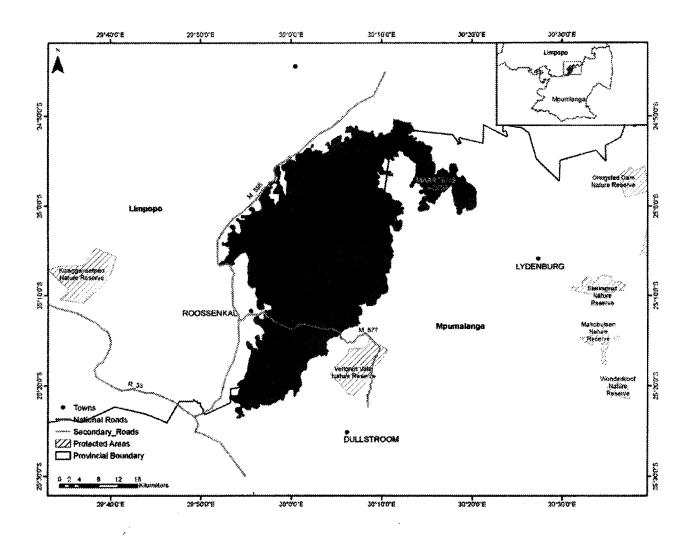
#### Description

Key biodiversity features include two mammal species including Juliana's Golden Mole and Gunning's Golden Mole; eight bird species including Blue Crane, Blue Korhaan and Cape Vulture, Grey Crowned Crane, Rudd's Lark, Southern Ground Hornbill, Wattled Crane, Yellowbreasted Pipit; nineteen plant species for example *Aloe fourei*, *Gladiolus rufomarginatus*, *Lydenburgia cassinioides*, *Resnova megaphylla*, *Scilla natalensis* and *Zantedeschia pentlandii*; and five vegetation types including Sekhukhune Montane Grassland, Sekhukhune Mountain Bushveld, Steenkampsberg Montane Grassland, Lydenburg Thornveld and Ohrigstad Mountain Bushveld. The ecosystem forms part of the Sekhukhuneland Centre of Endemism; it includes important subcatchments, pans and wetlands and is important for grassland processes.

#### Other information

The ecosystem is not protected.

Mpumalanga Tourism and Parks Agency & Department of Agriculture and Land Administration. 2007. Mpumalanga Biodiversity Conservation Handbook.



Location of Sekhukune Mountainlands showing original area of ecosystem

### 108. Sekhukune Norite Bushveld (LP 1)

Reference number LP 1

Listed under Criterion F

Biome Savanna

Province Limpopo (area previously part of Mpumalanga)

Municipality Greater Tubatse LM (100% of ecosystem)

Original area of ecosystem 38 000 ha

Remaining natural area of ecosystem (%) 92%

Proportion of ecosystem protected 0% of original area

Known number of species of special concern 9 threatened or endemic plant and animal

species including those listed below

### Geographical location

Three polygons delineated, occurring between Burgersfort, Motlolo, and Penge (2430AC, 2430AD, 2430CA, 2430CB and 2430CD). Low-lying norite bushveld with patches of quartzite delineated using landtypes, altitude and plant distribution ranges.

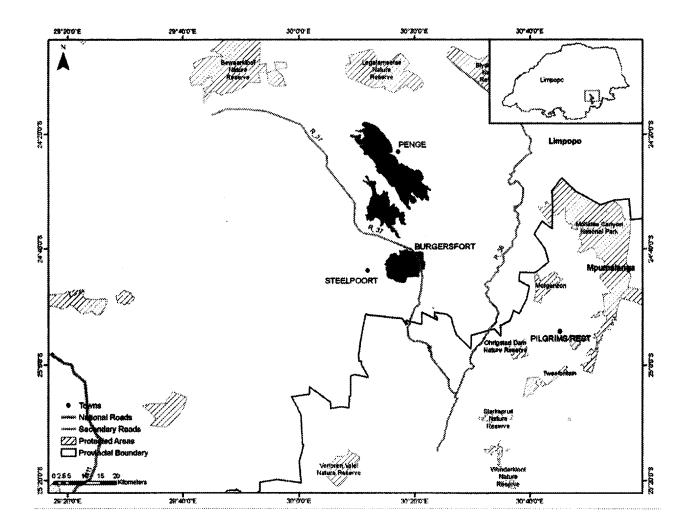
#### Description

Key biodiversity features include one mammal species, Meester's Golden Mole; two bird species, the Saddle-billed Stork and Southern Ground Hornbill; six plant species for example Asparagus clareae, Asparagus lynnetteae, Ceropegia distincta, Rhus batophylla and Schotia latifolia; and three vegetation types including Ohrigstad Mountain Bushveld, Sekhukhune Mountain Bushveld and Sekhukhune Plains Bushveld. The ecosystem includes part of the Sekhukhuneland Centre of Endemism; it includes important sub-catchments and provides an ecological corridor.

### Other information

The ecosystem is not protected.

Lötter, M.C. 2006. Mpumalanga Biodiversity Conservation Plan. Mpumalanga Tourism and Parks Agency, Neispruit.



Location of Sekhukune Norite Bushveld showing original area of ecosystem

### 109. Sihleza (KZN 36)

Reference number KZN 36

Listed under Criterion F

Biome Grassland and Forest

Province KwaZulu-Natal

Municipalities UMuziwabantu LM and Umzimkhulu LM

Original area of ecosystem 14 000 ha

Remaining natural area of ecosystem (%) 33%

Proportion of ecosystem protected 0% of original area

Known number of species of special concern 3 threatened or endemic animal species

including those listed below

### **Geographical location**

Glengarry (3029BC) and Weza (3029DA). Ecosystem delineated by contours associated with the surrounding steep sided mountains.

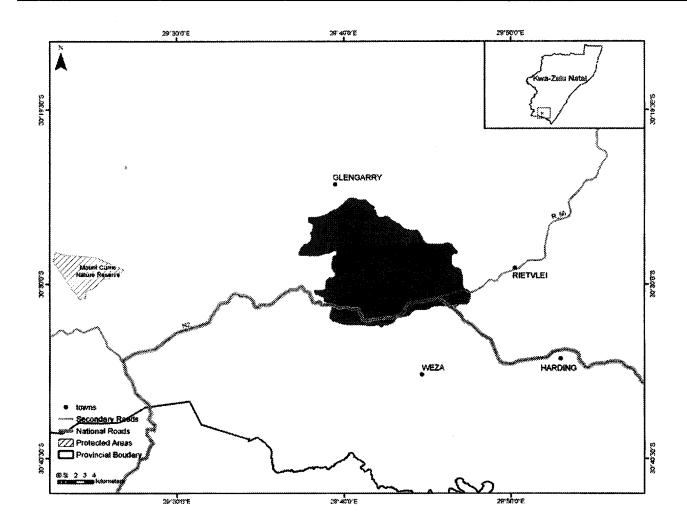
## **Description**

Key biodiversity features include one amphibian species, *Arthroleptella ngongoniensis*; two millipede species including *Allawrencius verrucosus* and *Doratogonus montanus*; and three vegetation types Ngongoni Veld, Eastern Mistbelt Forest and Midlands Mistbelt Grassland.

#### Other information

The ecosystem is not protected.

#### Reference



Location of Sihleza showing original area of ecosystem

### 110. Southern Weza State Forest (KZN 37)

Reference number KZN 37

Listed under Criterion F

Blome Grassland and Forest

Province KwaZulu-Natal

Municipalities UMuziwabantu LM and Greater Kokstad LM

Original area of ecosystem 8 000 ha

Remaining natural area of ecosystem (%) 66%

Proportion of ecosystem protected 0% of original area

Known number of species of special concern 3 threatened or endemic animal species

including those listed below

# Geographical location

Weza (3029DA). Ecosystem delineated by the Weza State Forest on the west (using the ridge line) and on the east; and by the river on the south. Ecosystem includes forest patches and the connecting grassland patches.

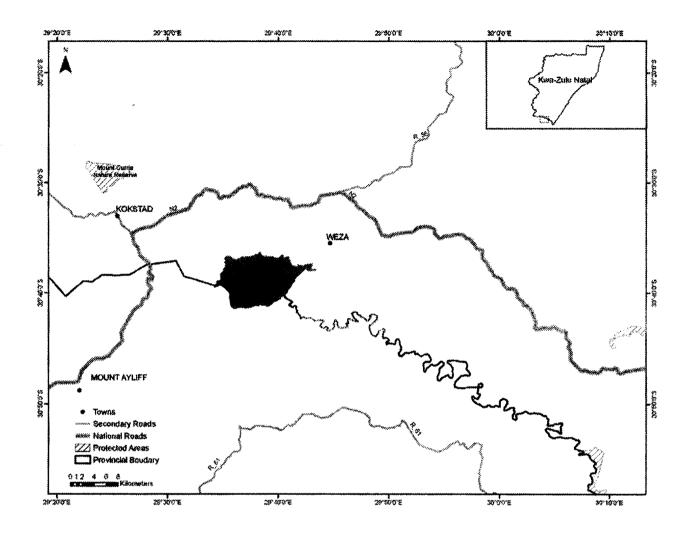
#### Description

Key biodiversity features include one amphibian species, *Arthroleptella ngongoniensis*; two millipede species including *Allawrencius verrucosus* and *Doratogonus montanus*; and three vegetation types including Drakensberg Foothill Moist Grassland, Eastern Mistbelt Forest and Midlands Mistbelt Grassland.

#### Other information

The ecosystem is not protected.

#### Reference



Location of Southern Weza State Forest showing original area of ecosystem

#### 111. Stoffberg Mountainlands (MP 10)

Reference number MP 10

Listed under Criterion F

Biome Grassland

Province Mpumalanga

Municipalities Steve Tshwete LM and Highlands LM

Original area of ecosystem 25 000 ha

Remaining natural area of ecosystem (%) 46%

Proportion of ecosystem protected 0% of original area

Known number of species of special concern 9 threatened or endemic plant or animal

species including those listed below

#### Geographical location

Small, highveld sandstone escarpment between Stoffberg and Wonderhoek (2529BC, 2529BD, 2529DA and 2529DB). Ecosystem delineated by topography, landtypes and species distributions.

#### Distribution

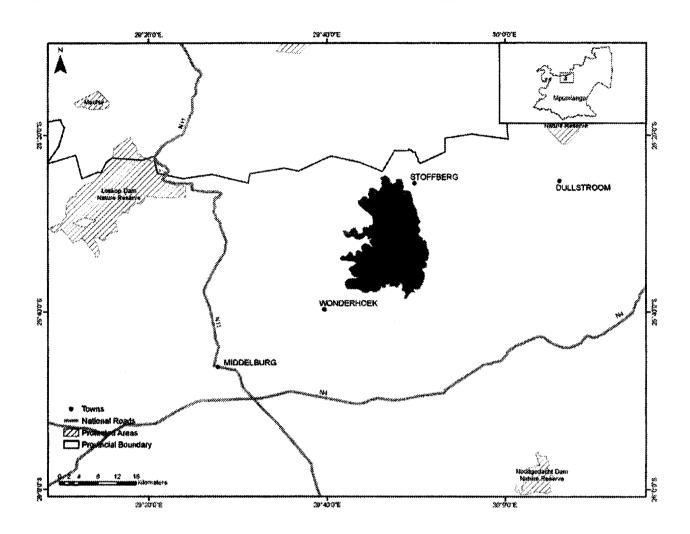
Key biodiversity features include two butterfly species including *Aloeides rossouwi* and *Dingana fraterna*; six bird species including Blue Crane, Grey Crowned Crane, Blue Korhaan, Rudd's Lark, Wattled Crane and Yellowbreasted Pipit; one plant species, *Eucomis autumnalis*; and one vegetation type, the Rand Highveld Grassland. The ecosystem includes important subcatchments; is an escarpment corridor; and is important for grassland processes.

# Other information

The ecosystem is not protected.

#### Reference

Mpumalanga Tourism and Parks Agency & Department of Agriculture and Land Administration. 2007. Mpumalanga Biodiversity Conservation Handbook.



Location of Stoffberg Mountainlands showing original area of ecosystem

## 112. Tsakane Clay Grassland (Gm 9)

Reference number Gm 9

Listed under Criterion A1

Biome Grassland

Provinces Gauteng and Mpumalanga

Municipalities Ekurhuleni MM, City of Johannesburg MM,

Midvaal LM, Lesedi LM and Dipaleseng LM

Original area of ecosystem 128 000 ha

Remaining natural area of ecosystem (%) 39%

Proportion of ecosystem protected 2% of original area

Known number of species of special concern

# Geographical location

In patches extending in a narrow band from Soweto to Springs, broadening southwards to Nigel and from there towards Vereeniging, as well as north of the Vaal Dam and between Balfour and Standerton (including Willemsdal).

# Description

Flat to slightly undulating plains and low hills. Vegetation is short, dense grassland dominated by a mixture of common highveld grasses such as *Themeda triandra*, *Heteropogon contortus*, *Elionurus muticus* and a number of *Eragrostis* species. Most prominent forbs are of the families Asteraceae, Rubiaceae, Malvaceae, Lamiaceae and Fabaceae. Disturbance leads to an increase in the abundance of the grasses *Hyparrhenia hirta* and *Eragrostis chloromelas*.

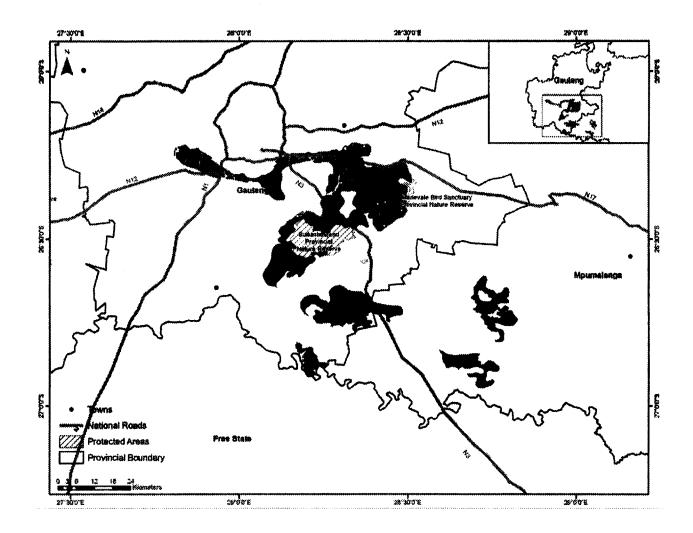
## Other information

Approximately 2% of the ecosystem is protected in Suikerbosrand, Olifantsvlei, Klipriviersberg and Marievale Nature Reserves.

#### Reference

Mucina, L., Hoare, D.B., Lotter, M.C., du Preez, P.J., Rutherford, M.C., Scott-Shaw, R., Bredenkamp, G.J., Powrie, L.W., Scott, L., Camp, K.G.T., Cilliers, S.S., Bezuidenhout, H., Mostert, T.H., Siebert, S.J., Winter, P.J.D., Burrows, J.E., Dobson, L., Ward, R.A., Stalmans, M.,

Oliver, E.G.H., Siebert, F., Schmidt, E., Kobisi, K., & Kose, L. 2006. Grassland Biome. In: L. Mucina & M.C. Rutherford (eds). The Vegetation of South Africa, Lesotho and Swaziland. *Strelitzia* **19**: 397-298. South African National Biodiversity Institute, Pretoria.



Location of Tsakane Clay Grassland showing original area of ecosystem

# 113. Umgeni Valley Bushveld (KZN 38)

Reference number KZN 38

Listed under Criterion F

Biome Grassland, Savanna and Forest

Province KwaZulu-Natal

Municipalities uMshwathi LM and Mkhambathini LM

Original area of ecosystem 2 000 ha

Remaining natural area of ecosystem (%) 66%

Proportion of ecosystem protected 0% of original area

Known number of species of special concern 5 threatened or endemic plant and animal

species including those listed below

## **Geographical location**

Cato Ridge (2930DA). Ecosystem situated on the west facing slope of the Umgeni Valley, delineated by the river and the crest of the slope.

## Description

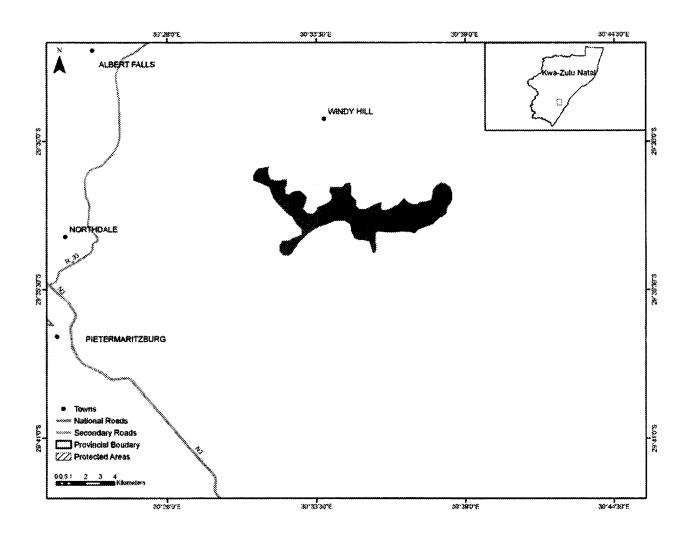
Key biodiversity features include one millipede, *Doratogonus cristulatus*; four plant species including *Ceropegia rudatisii*, *Diaphananthe millarii*, *Helichrysum woodii* and *Senecio exubera*; and four vegetation types including Ngongoni Veld, Eastern Scarp Forest, Eastern Valley Bushveld and KwaZulu-Natal Sandstone Sourveld.

# Other information

The ecosystem is not protected.

# Reference

Goodman, P.S. 2007. KwaZulu-Natal Terrestrial Conservation Plan (C-Plan), Version 4. Biodiversity Conservation Planning Division, Ezemvelo KZN Wildlife.



Location of Umgeni Valley Bushveld showing original area of ecosystem

## 114. Vaal-Vet Sandy Grassland (Gh 10)

Reference number Gh 10

Listed under Criterion A1

Biome Grassland

Provinces Free State and North West

Municipalities Mangaung LM, Masilonyana LM, Tokologo LM,

Tswelopele LM, Matjhabeng LM, Nala LM,
Setsoto LM, Nketoana LM, Moqhaka LM,
Ngwathe LM, Tswaing LM, Ditsobotla LM,
Lekwa-Teemane LM, Ventersdorp LM,
Potchefstroom LM, Matlosana LM and

Maquassi Hills

Original area of ecosystem 2 274 000 ha

Remaining natural area of ecosystem (%) 36%

Proportion of ecosystem protected < 1% of original area

Known number of species of special concern 1 endemic plant species

# Geographical location

South of Lichtenburg and Ventersdorp, stretching southwards to Klerksdorp, Leeudoringstad, Bothaville and to the Brandfort area north of Bloemfontein.

## Description

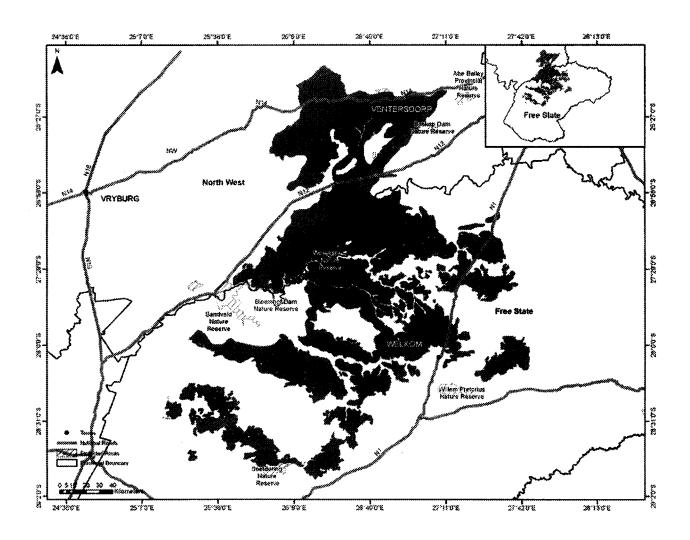
Plains-dominated landscape with some scattered, slightly irregular undulating plains and hills. Mainly low-tussock grasslands with an abundant karroid element. Dominance of *Themeda triandra* is an important feature of this vegetation ecosystem. Locally low cover of *T. triandra* and the associated increase in *Elionurus muticus*, *Cymbopogon pospischilii* and *Aristida congesta* is attributed to heavy grazing and/or erratic rainfall. At least one endemic plant species occurs in the ecosystem.

## Other Information

Less than 1% of the ecosystem is protected in the Bloemhof Dam, Schoonspruit, Sandveld, Faan Mountains, Wolwespruit and Soetdoring Nature Reserves.

## Reference

Mucina, L., Hoare, D.B., Lotter, M.C., du Preez, P.J., Rutherford, M.C., Scott-Shaw, R., Bredenkamp, G.J., Powrie, L.W., Scott, L., Camp, K.G.T., Cilliers, S.S., Bezuidenhout, H., Mostert, T.H., Siebert, S.J., Winter, P.J.D., Burrows, J.E., Dobson, L., Ward, R.A., Stalmans, M., Oliver, E.G.H., Siebert, F., Schmidt, E., Kobisi, K., & Kose, L. 2006. Grassland Biome. In: L. Mucina & M.C. Rutherford (eds). The Vegetation of South Africa, Lesotho and Swaziland. *Strelitzia* 19: 384-385. South African National Biodiversity Institute, Pretoria.



Location of Vaal-Vet Sandy Grassland showing original area of ecosystem

# 115. Wakkerstroom/Luneburg Grasslands (MP 11)

Reference number MP 11

Listed under Criterion F

Biome Grassland and Forest

Provinces Mpumalanga and KwaZulu-Natal

Municipalities Utrecht LM, eDumbe LM, Msukaligwa LM,

Mkhondo LM and Pixley Ka Seme LM

Original area of ecosystem 255 000 ha

Remaining natural area of ecosystem (%) 90%

Proportion of ecosystem protected 2% of original area

Known number of species of special concern 38 threatened or endemic plant and animal

species including those listed below

## Geographical location

Between Luneburg, Volksrust and Sheepmoor (2630CC, 2630CD, 2729BB, 2730AA, 2730AB, 2730BA, 2730BB, 2729BD, 2730AC, 2730AD, 2730BC, and 2730BD). Escarpment and mountainlands comprised of grassland and forest patches utilised as critical habitat for a variety of threatened birds, mammals and plants species. Ecosystem delineated by landscape, topography and underlying landtypes.

#### Description

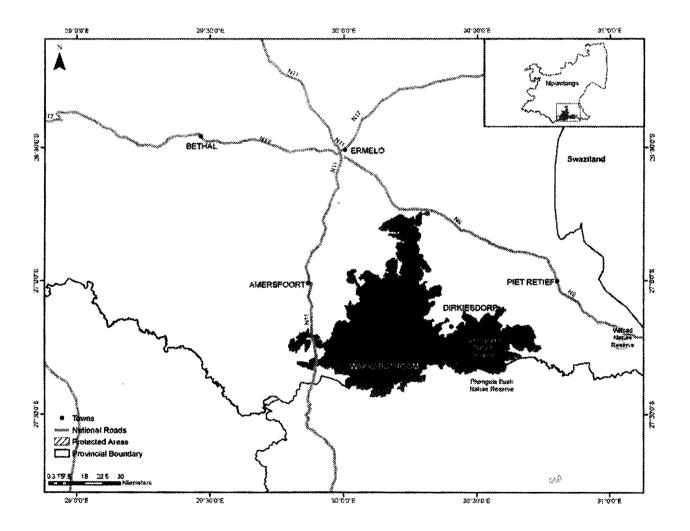
Key biodiversity features include three mammal species including Rough-haired Golden Mole, Cape Molerat and Oribi; three butterfly species including Aloeides merces, Aloeides titei and Dingana alaedeus; 10 bird species including Blue Crane, Blue Korhaan, Botha's Lark, Grey Crowned Crane, Rudd's Lark, Southern Bald Ibis, Southern Ground Hornbill, Striped Flufftail and Wattle Crane; one amphibian, Bufo gariepensis nubicolus; one reptile, Cordylus giganteus; twenty plant species for example Aloe modesta, Disa maculomarronina, Gladiolus appendiculatus, Nerine gracilis, Nerine platypetala, Protea subvestita and Scilla natalensis; and three vegetation types including Low Escarpment Misltbelt Forest, Paulpietersburg Moist Grassland, and Wakkerstroom Montane Grassland. The ecosystem includes important subcatchments, pans and wetlands; it is an escarpment corridor; and is important for grassland and forest processes.

Approximately 2% of the ecosystem is protected in the Paardeplaats Nature Reserve, Wakkerstroom Wetland Nature Reserve and Phongola Bush Nature Reserve,

## References

Goodman, P.S. 2007. KwaZulu-Natal Terrestrial Conservation Plan (C-Plan), Version 4. Biodiversity Conservation Planning Division, Ezemvelo KZN Wildlife.

Mpumalanga Tourism and Parks Agency & Department of Agriculture and Land Administration. 2007. Mpumalanga Biodiversity Conservation Handbook.



Location of Wakkerstroom/Luneburg Grasslands showing original area of ecosystem

## 116. Western Cape Milkwood Forest (FOz VI3)

Reference number FOz VI3

Listed under Criterion C

Biome Forest

Province Western Cape

Municipalities Cape Agulhas LM, City of Cape Town MM,

Hessequa LM and Overstrand LM

Original area of ecosystem Data not available

Remaining natural area of ecosystem 2 000 ha

Proportion of ecosystem protected 2% of remaining area

Known number of species of special concern

## Geographical location

Near the coast from the Groenvlei forest (Goukamma Nature Reserve), the Standford-Hermanus area, to parts on the eastern and western side of the Cape Peninsula.

#### Description

Generally low forest with trees with large stems and widely spreading crowns. The stands are often dominated by *Sideroxylon inerme*, and/or *Celtis africana* and/or *Apodytes dimidiata*. The understorey is either open or a shrub layer with diverse species, including soft shrubs of the Acanthaceae. The forest type is floristically impoverished but has dominant subtropical elements.

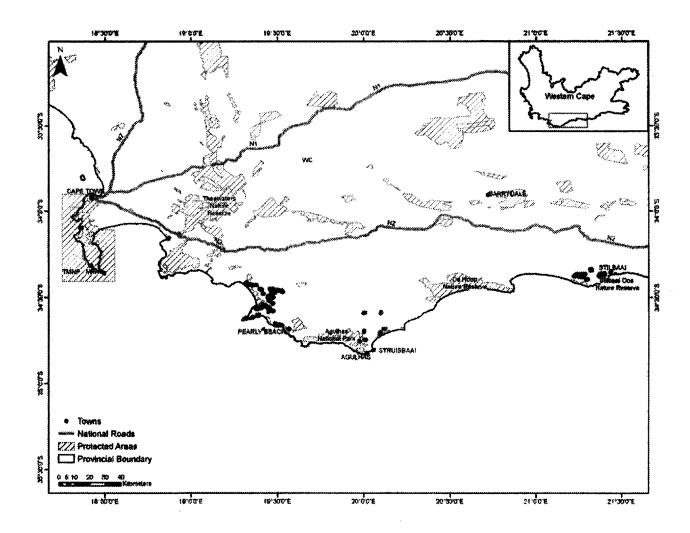
#### Other information

Approximately 2% of the ecosystem is protected in Goukamma Nature Reserve, Wilderness National Park, De Hoop, De Mond and Walker Bay Nature Reserves.

#### References

Mucina, L. & Geldenhuys, C.J. 2006. Afrotemperate, Subtropical and Azonal Forests. In: L. Mucina & M.C. Rutherford (eds). The Vegetation of South Africa, Lesotho and Swaziland. *Strelitzia* **19**: 603-604. South African National Biodiversity Institute, Pretoria.

Von Maltitz, G., Mucina, L., Geldenhuys, C., Lawes, M., Eeley, H., Adle, H., Vink, D., Flemming, G. & Bailey, C. 2003. Classification System for South African Indigenous Forests. An objective classification for the Department of Water Affairs and Forestry. Environmentek Report ENV-P-C 2003-017, CSIR, Pretoria.



Location of Western Cape Milkwood Forest (area of ecosystem enlarged for visibility at this scale)

## 117. Witwatersberg Skeerpoort Mountain Bushveld (GP 15)

Reference number GP 15

Listed under Criterion F

Biome Savanna and Grassland

Province Gauteng

Municipalities Mogale City LM, City of Tshwane MM and

Cradle of Humankind World Heritage Site

Original area of ecosystem 41 000 ha

Remaining natural area of ecosystem (%) 99%

Proportion of ecosystem protected 1% of original area

Known number of species of special concern 23 threatened or endemic plant or animal

species including those listed below

## Geographical location

West Rand of Gauteng including Hekpoort and Broederstroom (2527DC and 2527DD respectively). Ecosystem delineated by the Witwatersberg ridge system, associated rivers and drainage lines and the A21G quaternary catchment.

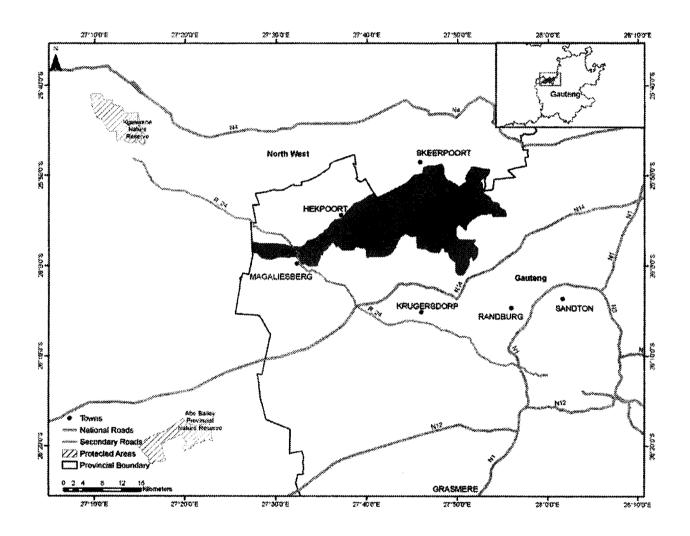
### Description

Key biodiversity features include Red or Orange Listed plants for example Aloe peglerae, Bowiea volubilis subsp. volubilis, Habenaria mossii, Melolobium subspicatum, Delosperma leendertziae and Holothrix randii; Red or Orange Listed mammals for example Brown Hyena, Schreiber's Long-fingered Bat, Geoffry's Horseshoe Bat and Temminck's Hairy Bat; Red or Orange Listed birds for example Cape Vulture, Blue Crane, White-bellied Korhaan, Secretarybird and African Finfoot; Red or Orange Listed or priority invertebrates for example Stobbia's Fruit Chafer, Gunning's Rock Scorpion and Golden Starburst Baboon Spider; and six vegetation types including Andesite Mountain Bushveld, Carletonville Dolomite Grassland, Egoli Granite Grassland, Gauteng Shale Mountain Bushveld, Gold Reef Mountain Bushveld and Moot Plains Bushveld. The Bloubankspruit, Crocodile River, Doringspruit, Grootvleispruit, Hekpoortspruit, Jackal Stream, Jukskeispruit, Kleinvleispruit, Leeuspruit, Magalies River, Muldersdrif se Loop, Skeerpoort, Snake Stream, Sterkwatersloop, Witwatersrandspruit and various unnamed wetlands are key features of the ecosystem.

Approximately 1% of the ecosystem is protected in Plovers Lake Nature Reserve.

#### Reference

Gauteng C-Plan Version 2. 2006. Gauteng Department of Agriculture, Conservation and Environment.



Location of Witwatersberg Skeerpoort Mountain Bushveld showing original area of ecosystem

# 7.4 Vulnerable (VU) ecosystems

# 118. Aguihas Limestone Fynbos (FFI 1)

Reference number FFI 1

Listed under Criterion D1

Biome Fynbos

Province Western Cape

Municipalities Overstrand LM and Cape Agulhas LM

Original area of ecosystem 29 000 ha

Remaining natural area of ecosystem (%) 64%

Proportion of ecosystem protected 8% of original area

Known number of species of special concern 49 Red Data plant species (EX, EW, CR, EN &

VU excl VU D2) and 47 endemic plant species

## Geographical location

Agulhas Plain from the vicinity of Hermanus to Bredasdorp and Struisbaai. The largest expanses of limestone are found between the Klein River Lagoon and Grootbos, around Hagelkraal, Heuningrug and Soetanysberg. Some unmapped outliers occur at Hangklip, Macassar (False Bay) and Buffels Bay (Cape Peninsula). The most southerly patch of the ecosystem extends to within 300 m of the southern tip of Africa.

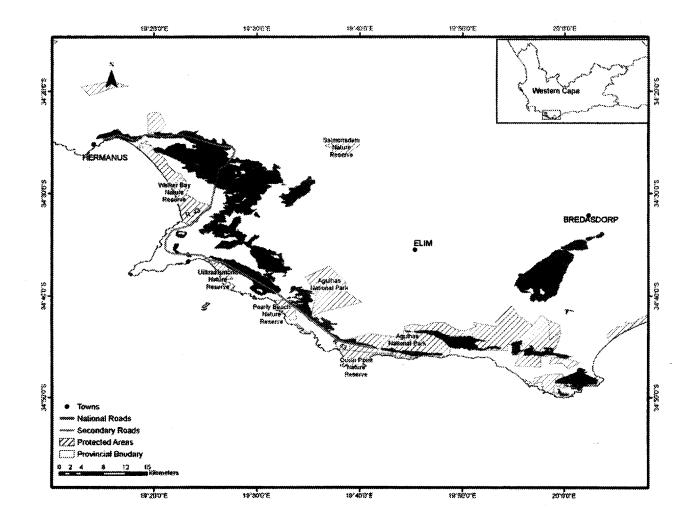
## Description

Low hills in plains, fragmented on the coastal margin of the Agulhas coastal forelands. Mainly on the plains, but with significant patches at higher altitudes such as on Soetanysberg. Moderately dense, low shrublands contain tall, emergent proteoids. Structurally it is mainly asteraceous and proteoid fynbos, with restioid fynbos in sandy areas and on limestone pavements. Wetter areas, such as waterlogged bottomlands, are dominated by *Leucadendron linifolium* restioid fynbos, grading to Agulhas Sand Fynbos where sands become deeper. At least 47 endemic plant species and 49 Red Data List plant species occur in the ecosystem.

Approximately 8% of the ecosystem is protected in the Agulhas National Park, with small patches also in Kogelberg Biosphere Reserve, Table Mountain National Park and Wolfgat Nature Reserve. A further 4% is found in private conservation areas such as Groot Hagelkraal and Oude Bosch.

## Reference

Rebelo, A.G., Boucher, C., Helme, N., Mucina, L., & Rutherford, M.C. *et al.* 2006. Fynbos Biome. In: L. Mucina & M.C. Rutherford (eds). The Vegetation of South Africa, Lesotho and Swaziland. *Strelitzia* **19**: 171-172. South African National Biodiversity Institute, Pretoria.



Location of Agulhas Limestone Fynbos showing original area of ecosystem

# 119. Albertinia Sand Fynbos (FFd 9)

Reference number FFd 9

Listed under Criterion A1

Biome Fynbos

Province Western Cape

Municipalities Swellendam LM, Hessequa LM, Mossel Bay

LM and WCDMA03

Original area of ecosystem 71 000 ha

Remaining natural area of ecosystem (%) 57%

Proportion of ecosystem protected 5% of original area

Known number of species of special concern 36 Red Data plant species (EX, EW, CR, EN &

VU excl VU D2) and 24 endemic plant species

# Geographical location

Generally longitudinally east-west-trending patches on the coastal plain from Potberg in the west to the Gouritz River in the east. Also found from Kleinberg to west of Mossel Bay, with isolated unmapped outliers near Groot Brak River and between Potberg and De Hoop Vlei. The patches of this ecosystem almost always border a limestone fynbos ecosystem. When enclosed by limestone, it is often found in depressions which can be extensive, for example the Wankoe south of Riversdale and Canca se Leegte south of Albertinia.

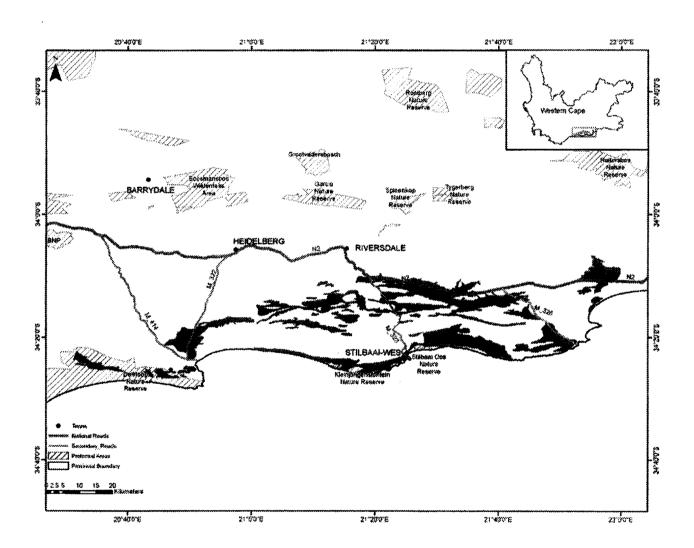
#### Description

Plains and undulating hills with numerous dune slacks forming the most extensive area of sand fynbos within the limestone fynbos area and occupying most of the depressions, valleys and lower slopes. Vegetation is characterised by medium tall (1.5–2 m tall) open shrub layer, together with a dense stratum of 1–1.2 m tall shrubs and hemicryptophytes. It is structurally predominantly proteoid fynbos, but with extensive restioid fynbos in the watercourses and coastal edges. At least 24 endemic plant species and 36 Red Data List plant species occur in the ecosystem.

Approximately 5% of the ecosystem is protected in De Hoop, Pauline Bohnen, Geelkrans, Kleinjongensfontein, Skulpiesbaai and Blomboschfontein Nature Reserves, with an additional 2% found in private conservation areas for example Rein's Coastal (Gouriqua) Nature Reserve, Die Duine.

#### Reference

Rebelo, A.G., Boucher, C., Helme, N., Mucina, L., & Rutherford, M.C. *et al.* 2006. Fynbos Biome. In: L. Mucina & M.C. Rutherford (eds). The Vegetation of South Africa, Lesotho and Swaziland. *Strelitzia* 19: 143-144. South African National Biodiversity Institute, Pretoria.



Location of Albertinia Sand Fynbos showing original area of ecosystem

# 120. Algoa Sandstone Fynbos (FFs 29)

Reference number FFs 29

Listed under Criterion A1

Biome Fynbos

Province Eastern Cape

Municipalities Kouga LM and Nelson Mandela Bay LM

Original area of ecosystem 34 000 ha

Remaining natural area of ecosystem (%) 42%

Proportion of ecosystem protected 2% of original area

Known number of species of special concern 4 endemic plant species

# Geographical location

Coastal flats at Port Elizabeth from Van Stadens River in the west to Southdene-Summerstrand in the east, located mostly some kilometres from the coast and close to the coast at only Maitland River Mouth and urbanised Summerstrand.

# Description

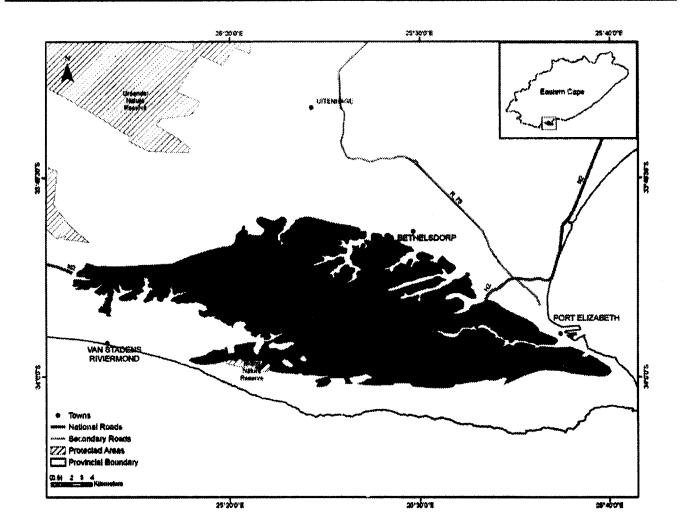
Flat to slightly undulating plain supporting grassy shrubland (mainly graminoid fynbos). Grasses become dominant especially in wet habitats. In the south this fynbos ecosystem borders on Albany Coastal Belt and Algoa Dune Strandveld and forms transitional mosaics with both. It also borders on patches of Southern Coastal Forest in this area. At least 4 endemic plant species occur in this ecosystem.

## Other information

Approximately 2% of the ecosystem protected in the Van Stadens Wild Flower Reserve, The Island Nature Reserve as well as in several private nature reserves.

## Reference

Rebelo, A.G., Boucher, C., Helme, N., Mucina, L., & Rutherford, M.C. *et al.* 2006. Fynbos Biome. In: L. Mucina & M.C. Rutherford (eds). The Vegetation of South Africa, Lesotho and Swaziland. *Strelitzia* 19: 127. South African National Biodiversity Institute, Pretoria.



Location of Algoa Sandstone Fynbos showing original area of ecosystem

## 121. Badplaas Mountainlands (MP 12)

Reference number MP 12

Listed under Criterion F

Biome Grassland, Savanna and Forest

Province Mpumalanga

Municipality Albert Luthuli LM

Original area of ecosystem 14 000 ha

Remaining natural are of ecosystem (%) 91%

Proportion of ecosystem protected 0% of original area

Known number of species of special concern 11 threatened or endemic plant and animal

species including those listed below

## Geographical location

Five kilometres north-west of Badplaas (2530CD and 2530DC). Large untransformed montane grassland with isolated forest patches. Ecosystem delineated by landscape and landtypes together with geographical features.

## Description

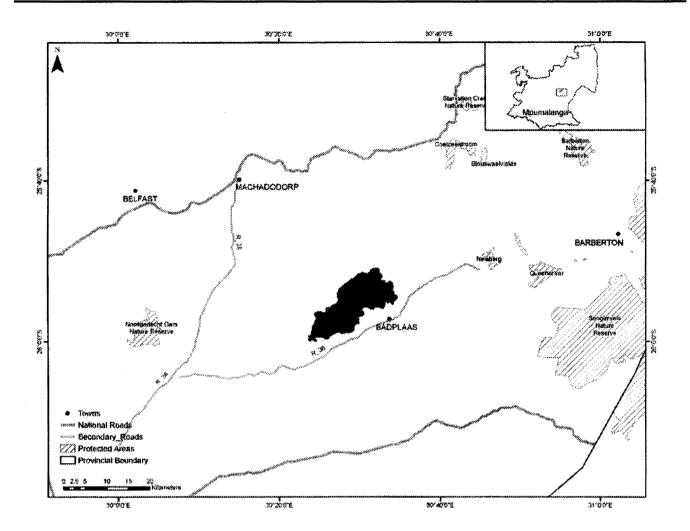
Key biodiversity features include five mammal species including Rough-haired Golden Mole, Meester's Golden Mole, Natal Long-fingered Bat, Peak-saddle Horseshoe Bat and Oribi; seven bird species including Blue Crane, Grey Crowned Crane, Rudd's Lark, Southern Ground Hornbill, Striped Flufftail, Wattle Crane and Yellowbreasted Pipit; and three vegetation types including KaNgwane Montane Grassland, Barberton Serpentine Sourveld and Dry Afromantane Forest. The ecosystem includes important sub-catchments; it provides an ecological corridor; and is important for forest and grassland processes.

#### Other information

The ecosystem is not protected.

#### Reference

Mpumalanga Tourism and Parks Agency & Department of Agriculture and Land Administration. 2007. Mpumalanga Biodiversity Conservation Handbook.



Location of Badplaas Mountainlands showing original area of ecosystem

## 122. Barberton Mountainlands (MP 13)

Reference number MP 13

Listed under Criterion F

Biome Grassland, Savanna and Forest

Province Mpumalanga

Municipalities Albert Luthuli LM, Umjindi LM and Nkomazi LM

Original area of ecosystem 70 000 ha

Remaining natural area of ecosystem (%) 80%

Proportion of ecosystem protected 52% of original area

Known number of species of special concern 37 threatened or endemic plant and animal

species including those listed below

# Geographical location

Mountain range immediately south and east of Barberton (2530DD and 2531CC). Ecosystem delineated by the moist landscape and ancient Barberton Sequence geological formation (and resulting landtypes). Ecosystem boundary refined using climate and species distributions.

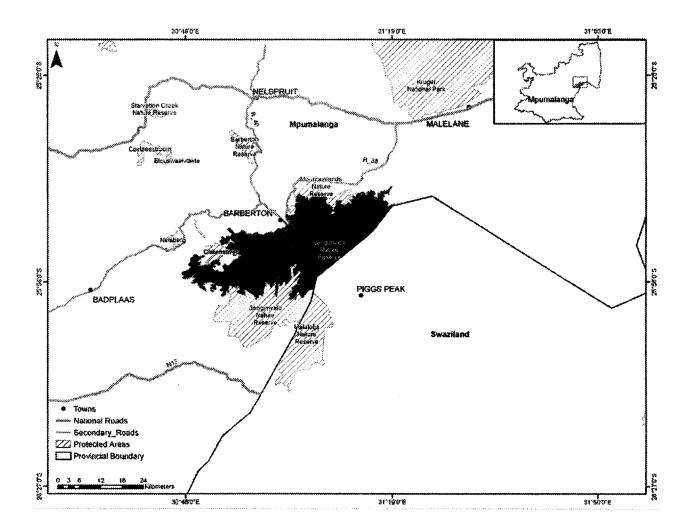
## Description

Key blodiversity features include one mammal species, Rough-haired Golden Mole; two butterfly species including Lepidochrysops jefferyi and Lepidochrysops swanepoeli; seven bird species including Blue Crane, Blue Swallow, Grey Crowned Crane, Saddle-billed Stork, Southern Ground Hornbill, Striped Flufftail and Yellowbreasted Pipit; four reptile species including Aspedilaps scutatus intermedius, Bradypodion transvaalense, Cordylus warreni barbertonensis and Lamprophis swazicus; twenty-three plant species for example Aloe craebii, Aloe modesta, Haworthia limifolia var. limifolia, Leucospermum gerrardii, Rhus pygmaea and Streptocarpus pogonites and Warburgia salutaris; and five vegetation types including Barberton Montane Grassland, Barberton Serpentine Sourveld, Kaalrug Mountain Bushveld, Barberton Scarp Forest and Maputaland Scarp Forest. The ecosystem includes part of the Barberton Centre of Endemism; it includes important sub-catchments; provides an escarpment corridor; and is important for grassland and forest processes.

Approximately 52% of the ecosystem is protected in the Barberton Mountainlands Nature Reserve, Barberton Municipal Nature Reserve, Cynthia Letty Nature Reserve, Ida Doyer Nature Reserve, Nkomazi Wilderness, Queensriver Primary Conservation Area, Songimvelo Nature Reserve, Tinie Louw Nature Reserve and Thorncroft Nature Reserve.

#### Reference

Mpumalanga Tourism and Parks Agency & Department of Agriculture and Land Administration. 2007. Mpumalanga Biodiversity Conservation Handbook.



Location of Barberton Mountainlands showing original area of ecosystem

# 123. Beinn Mheadmon Mountain Grasslands (KZN 39)

Reference number KZN 39

Listed under Criterion F

Biome Grassland

Province KwaZulu-Natal

Municipalities uMngeni LM and Impendle LM

Original area of ecosystem 5 000 ha

Remaining natural area of ecosystem (%) 27%

Proportion of ecosystem protected 0% of original area

Known number of species of special concern 13 threatened or endemic plant species

including those listed below

## Geographical location

Merrivale (2930CA). Ecosystem delineated by ridges, predominantly in the Midlands Mistbelt Grassland. Ecosystem abuts the Drakensberg Foothill Wattled Crane Habitat threatened ecosystem (KZN 47).

#### Description

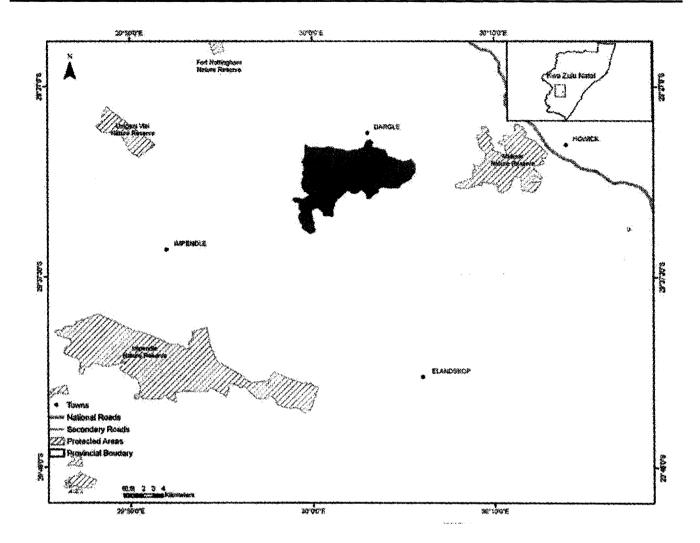
Key biodiversity features include one amphibian species, *Afrixalus spinifrons intermedius*; two bird species including Blue Swallow and Wattled Crane; three millipede species including *Centrobolus tricolor*, *Doratogonus cristulatus*, and *Doratogonus montanus*; five plant species including *Geranium natalense*, *Hesperantha woodii*, *Kniphofia buchananii*, *Plectranthus rehmannii* and *Senecio exuberans*; two reptile species including *Bradypodion bourquini* and *Bradypodion thamnobates*; and two vegetation types including Drakensberg Foothill Moist Grassland and Midlands Mistbelt Grassland.

#### Other information

The ecosystem is not protected.

## Reference

Goodman, P.S. 2007. KwaZulu-Natal Terrestrial Conservation Plan (C-Plan), Version 4. Biodiversity Conservation Planning Division, Ezemvelo KZN Wildlife.



Location of Beinn Mheadmon Mountain Grasslands showing original area of ecosystem