

The Monkeyland and Birds of Eden forest is described as a Afromontane Forest. Trees in a Afromontane Forest can be up to 30 m or 40 m tall and distinct strata of emergent trees, canopy trees and shrub and herb layers are present.

Some of the trees, shrubs etc found inside the Monkeyland forest are listed below:

Real Yellowwood *Podocarpus latifolius*

This is a large tree which reaches a height of 20 - 30 meters. The wood of this tree has been used, more than any other indigenous timber and most of the floors in the fine old Cape homesteads were made of this wood.

Outeniqua Yellowwood *Podocarpus falcatus*

A medium to large tree which reaches a height of 20 to 60 meters. Only the female tree bares fruit, these fruits are large and fleshy, almost spherical. This is the well-known 'Big Tree' of Knysna. The Outeniqua Yellowwood's wood is very valuable: the straight stems were used for the topmasts and yards of ships and the timber is highly esteemed in boat building today. It is easily differentiated from the Real Yellowwood in that it's leaves are much smaller and slightly sickle-shaped, or falcate.

White Witchhazel *Trichocladus ellipticus*

This is a evergreen shrub and it is easily identified by it's leaves which are like velvet to the touch as result of the bottom of the leaf which is covered in dense rusty-coloured hairs. The wood of this tree is white in colour and very hard. The Xhosa name for this tree is iThambo which means 'a bone', but the pieces are usually too short to be of any use so it is traditionally mainly used for bucket handles.

Silky bark *Maytenus acuminata*

A unarmed shrub or small tree with a height of about 8 meters, but it can reach heights of about 15 meters in favourable conditions. The tree bares a almost spherical red or orange coloured fruit. So-called latex threads are present in the branches, leaves, flowers and fruits; if snapped and gently drawn apart these silky threads become clearly visible.

Small knobwood *Zanthoxylum capense*

This is a protected tree in South Africa (CITIES I). The tree is usually a small multi-branched tree of about 10 meters in height, but may reach 15 meters in favourable conditions. In

Afrikaans this tree is known as Perdepram. In Zulu it is known as umNugumabele meaning 'white womens breast'. In Zulu it's name has been derived from the scattered cone-shaped knobs on the trees' bark.

The leaves of the tree are browsed by game such as the kudu, grey duiker and klipspringer. The ripe fruits are enjoyed by our primates and the seeds are eaten by various species of birds. Larvae of the citrus swallowtail butterfly *Papilio demodocus*, the white-banded swallowtail *Papilio echeroides* and the emperor swallowtail *Papilio ophidicephalus* butterflies feed on the leaves of the tree. The fruits of the tree is produced in clusters, it is edible and acrid and tastes strongly of lemon, leaving a persistent burning sensation in the mouth. Traditional it has been used for all kinds of medical treatment.

The main uses are to ease colic, especially flatulence, and to treat palsy. Gastric and intestinal disorders, as well as intestinal parasites, and epilepsy is treated with an infusion of the leaves and tree roots. The bark, which may be taken as a tonic or chewed to relieve toothache, is also widely used as a remedy for snakebite, either as an oral medicine or as a local application to the wound. The dry, powdered root and stem bark is used to treat sore throats, blood poisoning and related diseases. Quick relief from stomach cramps is achieved with tea made from the leaves. The crushed seeds of the tree can also be used as perfume. Gall-sickness in cattle is treated with a decoction made from the bark. A decoction and infusion of the leaves is said to be effective against colds and fever and was a popular treatment during the influenza epidemic of 1918.

Bladder-nut *Diospyros whyteana*

This is a small to medium sized tree which reaches a height of about 15 meters. In Afrikaans this tree is known as the Tolbos. The tree is also known as the Forest Monkey Plum, the primates at Monkeyland go bananas for its fleshy red berries which are bitter-sweet in taste. The yellowish seeds of the tree can be roasted, ground and used as a substitute for coffee and it has a pleasant taste. The leaves of this tree are browsed by stock and game such as kudu, nyala and klipspringers. It is also very popular with fruit-eating birds such as Rameron pigeons, African green pigeons, louries, barbets and bulbuls. An enema is made from the bark of the tree to treat impotency and infertility. An itchy rash on the skin is treated with an infusion of the leaf and root.

Dogwood *Rhamnus prinoides*

This tree is known in Afrikaans as 'Blinkblaar' because of its shiny leaves. The tree is small and reaches a height of about 5 meters. The wood of this tree is hard, the leaves and berries are attractive and make striking floral arrangements.

Cat-thorn *Scutia myrtina*

In Afrikaans the tree is known as Katdoring. It is usually a scrambling shrub or a liane, but it can develop into a small tree of about 8 meters in favourable conditions. The fruits of the tree are black when mature. The astringent fruit is eaten mainly by children and birds.

In India the leaf is used as an ointment applied locally to hasten parturition of both the child and the placenta.

Ironwood olive *Olea capensis*

This is a medium-tall to very tall tree and can reach a height of about 35 meters. It is also known as the Rock or Small ironwood. The bark darkens with age and, if damaged, it 'bleeds' a slimy, black gum. It has very small, white or cream scented flowers, and olive-like purple fruits when mature the fruit is very tasty. In the olden days the hard and heavy wood of this tree was used as railway sleepers. The wood was also used in bridge construction and for flooring blocks. This wood produced beautiful furniture. The Wild olive *Olea europaea* is also found in the forest here at Monkeyland. This tree can reach a height of about 10 meters, however when conditions are favourable it may even grow as high as 18 meters. The wood of this tree is close-grained and extremely hard and durable. In the olden days it was used to make fence posts and it provides pleasant-smelling fuel. Africans drink an infusion of fresh bark to relieve colic, they also use an infusion of the leaves as an eye lotion for both humans and animals.

A decoction of the leaves provides a gargle for sore throats. The fruits are rather bitter, but never-the-less sought after by the primates. The Coast Olive *Olea exasperata* is not that common here at Monkeyland. It has an interesting use though: in the 17th century the root was used as an antidote for snakebites.

Forest Tree Fern *Cyathea capensis*

This fern has no flowers. It is evergreen and the trunk of the tree fern is covered with blackish leaf-stubs and scales. The large leaves of the Tree fern can be up to 3 meters in length. This fern grows in moist conditions and in high forests. The Common Tree Fern is

similar, and it is often found on the forest edges of Monkeyland and at the sanctuarie mountain streams.

Common Turkey-berry *Canthium inerme*

This is a shrub or a small tree with a height of 3-8 meters. In Afrikaans this tree is known as Gewone bokdrol. The fruit of this tree becomes dark brown when mature and closely resemble goat droppings (hence the Afrikaans name). The fruit of the Turkey-berry is tasty and sought after by the primates. The leaves of this tree is used to treat stomach ailments.

Kooboo-berry *Cassine aethiopica*

This is an evergreen tree which grows to be about 6 meters tall, but can reach heights of about 15 meters in favourable conditions. The bark and leaves of this tree are eaten by black rhino and the leaves by stock and game such as kudu, nyala, blou wildebees, grey duiker etc. The fruit is edible and eaten by bushpigs, wharthogs, baboons, vervets etc when they fall unto the ground. The ripe fruits are also popular with birds such as the loeries, Cape parrots, African green pigeons and Swainson's francolins. The bark is used in tanning leather giving it a characteristic light brown colour. An infusion is made from the root bark of the tree and this is used for treating diarrhoea and dysentery. This muti is also sometimes used as an enema.

Sagewood *Buddleja salviifolia*

A semi-deciduous to evergreen tree which reaches a height of about 8 meters. This is probably one of the best plants to attract a wide variety of insect species and therefor a large variety of insect-eating birds.

The flowers on the tree produce a large amount of pollen and nectar, making this tree popular amongst bee farmers. The leaves are browsed on by game such as bushbuck, impala, kudu, eland and the grey duiker. At least 15 species of butterflies visit these bushes when they are in flower, but it is the host plant for only one species, the African leopard butterfly *Phalanta phalantha aethiopica*. A decoction of the root is used as a remedy for coughs and colic and an infusion of the leaves is applied as eye lotion. Fresh or dry leaves can be boiled and used as tea-drink it without milk but add a bit of honey.

Red Currant *Rhus chirindensis*

A semi-deciduous tree which grows up to 20 meters high. The bark and leaves are browsed on by game and the sweetish ripe red fruits are very popular amongst birds, and especially our primates. The sap from the stem is used for treating heart complaints.

Kamassi *Gonioma kamassi*

This is a shrub or small tree with a height of about 2 - 8 meters. The leaves are usually in whorls of 4 (occasionally 3), they are simple shaped, apex tapering and their margins are entire. The bark of the tree is light grey and rather smooth with a watery or milky latex present in the inside.

Castor oil plant *Rhus chirendensis*

This is a large shrub or small tree of up to four meters in height. The plant part which is used most commonly is it's oil which is extracted from the plant's seeds. Castor oil is a well-known purgative medicine. The leaves of the plant are popular in Zulu and Sothu traditional medicines. A infusion of the leaves is made and this is administered orally or as enemas as a cure for stomach ache. The root and leaf poultices are also used amongst the Zulu and Sothu tribes, in this instance they are applied to wounds, sores and boils. The seeds of this plant are not commonly used - the reason: as few as two seeds may cause fatal poisoning in humans.

False Olive *Buddleja saligna*

This is an evergreen tree which grows up to a height of 10 meters. The heavy, dense wood of this tree makes excellent fuel and generates intense heat. This tree attracts many butterflies and bee's due to its masses of small white flowers whicj produce copious nectar and pollen. Scrapings of the root are used as a purgative and to induce vomiting. A decoction made from the leaf is used to treat coughs and colds.

Assegai *Curtisia dentate*

This is a medium to large-sized tree, usually around 10 meters in height, but sometimes they can be up to 20 meters in height. The part of this tree used for medical purposes is the bark. The bark of this tree is used by the Zulu traditional medicine doctors for stomach ailments and diarrhea. The bark is also used traditionally as an aphrodisiac and "to purify the blood".

Forest elder *Nuxia floribunda*

This is a small tree which can reach a height of about 10-25m. This tree is known as the Bosvlier in Afrikaans. The large handsome flower heads of the tree distinguishes this species from the other species of Nuxia. In the olden days the wood of this tree was used to make wagons.

Black stinkwood *Ocotea bullata*

The Stinkwood is a large evergreen tree of up to 20-30 meters in height. The bark is pale brown and has a beautiful, mottled appearance, but may become dark brown and flaky in old trees. The leaves of this tree are large, glossy green and have swollen pits ('bullae') in the axils of the main veins.

The finely ground bark of this tree is used as a snuff or the smoke is inhaled to relieve headaches. A fusion of the bark, leaves and tree roots is also used as a local application to the area of the bladder in urinary disorders and it is claimed to be beneficial for stomach trouble and it is used as an emetic for emotional and nervous disorders.

The white stinkwood *Celtis africana*

A large semi-deciduous tree which grows to about 40 meters high. The leaves and young branches of the tree are browsed on by cattle and game such as kudu, grey duiker, impala and bushbuck.

However most animals are more partial to the adult leaves than the younger leaves and usually pick the leaves of the forest floor. The pleasant tasting sweet ripe fruits of this tree is very popular with fruit-eating birds and our primates. Larvae of the African snout *Libythea labdaca* and blue-spotted *Charaxes cithaeron* butterflies live on the tree. Young branches and coppice shoots are popular as handles for implements because the wood carves easily and is very durable. It is a protected tree in South Africa.

Cape beech *Rapanea melanophloeos*

It is usually a medium sized tree of about 5 to ten meters in height, but they can reach a height of about 20 meters. Decoctions of the bark are used by the Zulu as expectorants and emetics and also against muscular pain, stomach disorders and to strengthen the heart. The flowers of this tree attracts many insect species and in turn many insect-eating birds. The ripe fruits are eaten by birds such as crested guineafowls, African green pigeons, Rameron pigeons, Knysna and purple crested louries and barbets. The primates at Monkeyland also

enjoy these fruits which grow in dense clusters in the leaf axils and above leaf scars below the leaves. A decoction of the bark is used as an expectorant and an emetic. Pieces of the bark are chewed or dried and powdered to treat sore throats and wounds. The bark contains 12 - 15% tannin.

The Cape plane *Ochna arborea*

A shrub or small tree reaching a height of 2 to 12 meters. The tree is known in Afrikaans as Kaapse rooihout. The wood of the tree is heavy, hard and strong. It was used in the olden days for making implement handles and carved sticks. It is also regarded as a charm to drive evil spirits away from the home and cattle kraals. The bark of the tree contains 8% tannin and has been used as snuff to cure headaches.

Common dovyalis *Dovyalis rhamnoides*

A shrub or small tree reaching a height of about 7 meters. The Afrikaans name for this tree is Gewone suurbessie. The fruit of this tree is bright red when mature, they are pleasantly acid-flavoured and much sought after.

Common Spikethorn *Maytenus heterophylla*

This is a thorny tree which reaches a height of about 9 meters at most, but usually has a height of 4-5 meters. These trees are often found growing on termite mounds. The tree is covered with sharp thorny spikes and its leaves are produced in clusters on dwarf lateral bracelets. This tree is related to the White forest spike-thorn *Maytenus nemorosa* and the Bastard spike-thorn *Putterlickia pyracantha* which are also found within the Monkeyland forest.

September bush *Polygala myrtifolia*

An evergreen small tree up to 4 meters in height, with pink to purple flowers. The fruit of the tree is small, oval and slightly winged, they are eaten by laughing doves. The flowers of the September bush attracts masses of black and brightly coloured carpenter bees which pollinate them. The leaves of this tree are made into a poultice for treating gout.

Candlewood *Pterocelastrus tricuspidatus*

A small to medium tree which reaches a height of about 20 meters. The tree is also known as the Cherrywood. The tree's fruits are edible and a favourite amongst the primates at Monkeyland. The Afrikaans name for this tree is Kershout and this is where the tree has

derived its name from. The bark of this tree yields 2% tannin; it is used by Zulu's, powdered and mixed with the dried carcass of a fruit bat and parts of other plants, to treat spinal diseases.

Large Num-num *Carissa bispinosa*

This small tree (with a height of about 5 meters at most) is distinguished by its Y-shaped thorns and vitamin rich berries. This tree's fruit is edible and extremely healthy because it contains all the vitamins: A to Z.

Sieketroos *Arctopus echinatus*

This peculiar plant has a thick, tuberous root with a rosette of spiny leaves which is borne flat on the ground. Male and female flowers are formed on different plants. The roots of this plant is used to bring comfort to the sick. Decoctions, infusions and tinctures of the root have been used to treat venereal diseases. The medicine is said to be diuretic, demulcent and purgative, and is widely used to treat bladder ailments and skin irritations. Other traditional uses include the treatment of epilepsy.

Climbing saffronwood *Cassine tetragona*

A scrambling shrub or small tree with a height of about 3 - 5 meters. This tree is related to the Bastard saffronwood *Cassine peragua* which is also found in the Monkeyland forest. The latter tree reaches a height of about 10 meters and the leaves of this tree are apparently toxic: when administered in large quantities by humans it will cause general paralysis and death as a result of respiratory failure.

The wood of the Bastard saffron tree was used to make large ladles in the time of Simon van der Stel (late 17th century). The Mountain saffronwood *Cassine parvifolia*, which is also found in the Monkeyland, is also related to the above two trees

Spoonwood *Hartogia schinoides*

A shrub or small, much-branched tree up to 9 meters in height with a single or multi-stemmed base. The tree derives its name from its spoon-shaped leaves. The fruits of the Spoonwood is large (12 mm in diameter), fleshy and loved by the primates. The wood of this tree is light in colour, fine-grained and hard. It is said to be suitable for turnery and cabinet work.

Bastard taaibos *Allophylus decipiens*

A many-stemmed shrub or small tree with a height of 4 meters. The leaves of this tree are 3-foliate. The wood of the tree is white, hard, dense and despite its small size suitable for cabinet work. The seeds of this tree germinate easily and the fruit is enjoyed by the primates.

Hard pear *Olinia ventosa*

A small to medium size tree which reaches a height of 25 meters. The edible fruits are berry-like and red when mature. The wood of this tree is hard, heavy and strong. In the olden days it was used for fencing and telegraph poles.

White pear *Apodytes dimidiata*

An evergreen tree which grows up to 25 meters high. The leaves of the tree is browsed on by game and the birds and primates enjoy the fleshy fruit the tree bears. The leaves of this tree are boiled whole and eaten with porridge. An infusion made from root bark is used as an enema for intestinal parasites. This is a protected tree in South Africa.

Bracket fungus

The size of this fungus varies and many species of this fungi is known under the same name. The fungus derives its name because the fruit-body projects like a bracket from either dead wood, branches or tree trunks. Bracket fungus plays an integral part in the decomposition of wood.

Bushman poison bulb *Boophane disticha*

This bulbous plant has large, strap-like leaves arranged in a very distinctive fan-shaped manner. The outer scales of the bulb is used as an outer dressing after traditional circumcisions and they are also applied to boils and septic wounds to alleviate pain and to 'draw out' the pus. Weak decoctions of the bulb scales are administered by mouth or as an enema for various complaints such as headaches, abdominal pain, weakness and eye conditions. Strong decoctions of the bulb should not be used as it can induce visual hallucinations and if too strong it can be fatal.

Pennywort *Centella asiatica*

This is a perennial plant often found in moist places. In South Africa and elsewhere, this plant has been used to treat leprosy and cancer. It is widely used for wound treatment, fever,

syphilis and as a diuretic and purgative. This plant is also a popular constituent of homeopathic remedies claimed to be useful for treating acne and allergies

Dawidjiewortel *Cissampelos capensis*

The plant is a perennial climber with twining stems and rounded, bright green leaves. The rhizomes and roots of this plant are used for medical purposes. It is traditionally taken as a blood purifier, for boils and syphilis. It is also used for bladder ailments, diarrhea, colic and cholera.

Fennel *Foeniculum vulgare*

This is a perennial herb which can grow up to 1.5 meters in height. The small dry fruits of the plant is used to make a juice for chronic coughs. Fennel seeds are also traditionally used to prepare domestic gripe water to treat flatulence in infants. Fennel oil is used medicinally for the symptomatic relief of digestive disturbances.

Brandblare *Knowltonia vesicatoria*

This is a perennial herb with a short rhizome and fleshy roots. The plant is fresh leaves are used as an old Cape remedy for lumbago and rheumatism. The roots of this plant are also used to treat colds and influenza. The fresh roots are also sniffed for headaches and can be applied directly to alleviate toothache.

Wild mint *Mentha longifolia*

This is a perennial herb used for many different purposes. The main use is for coughs, colds, asthma and other respiratory ailments. It has also been used to treat headaches, fevers, indigestion, flatulence, hysteria, painful menstruation, delayed pregnancy and for urinary tract infections. Externally it has been used to treat wounds and swollen glands.

The common forest grape *Rhoicissus tomentosa*

A large scrambler, with a thick, rough barked stem. This woody climber can reach the tops of trees with ease and is therefore often sighted on the tops of 20 meter high trees. The leaves have a simple shape and are large - almost circular. The fruits are grape-like in appearance and edible. When boiled with plenty of sugar they are said to make a delicious conserve and an excellent jelly. The split branches have been used as a rope for tying down thatch and also for basket-making. The roots boiled in milk are given to calves as an anthelmintic.

Wild Olive *Olea europaea Africana*

A evergreen tree which grows up to 14 meters tall. The tree is popular as a food source with the forest animals - they relish the tasty fruit it bears. The leaves soaked in water can be used as a substitute for tea. An infusion made from the fresh bark is used to relieve colic. An infusion from the leaves is used as eye lotion, not only for humans but also for cattle. A decoction of the leaves is used as a gargle for a sore throat. Snuff made from dried leaves is used to stop bleeding of the nose and in some areas the juice of the tree is used in making ink. This is a protected tree in the Northern Cape, Free State and North-West Province of South Africa.

Wild peach *Kiggelaria Africana*

A semi-deciduous to evergreen tree. The bark of this tree is hairy and yellowish brown on young branches but grey-brown to dark-brown on older branches and stems. The oil-rich aril on the seeds attracts many fruit-eating birds. The larvae of the garden acraea *Acraea horta*, dusky-veined acraea *Acraea igola* and the battling glider *Cymathoe alcimeda* butterflies eat the leaves. These larvae, especially those of the garden acraea, are considered a delicacy by Klaas's, Diederik and emerald cuckoo. The leaves contain hydrocyanic acid and are therefore not browsed on by cattle and game.