#### <u>CEPF-MPAH / Botanical Society Grant 59606:</u> <u>Appendix 3</u>



CRITICAL ECOSYSTEM

### A GUIDE TO COMMON TREES OF BOSCH BERG FOREST



Some notes and pictures of the more common trees along the trails through the forests at Bosch Berg Nature Reserve The forest patches at Bosch Berg and Boston View are Southern Mistbelt Forests. In KwaZulu-Natal these cool moist forests are found a series of patches occurring mainly between 1000 and 1400 meters above sea level on steep south and southeast facing slopes where evaporation is less and the effects of fire reduced. Mists are frequent in summer and frosts in winter and snow falls occasionally. The average yearly rainfall is between 950 and 1 350 mm and falls mostly in the summer months.

The dominance of Yellowwood or *Podocarpus* species together with numerous other broad-leaved trees is characteristic of these forests. Tall canopy trees such as Yellowwoods, Cape chestnuts and White stinkwoods form the upper layer above a shrubby understory of Sage wood, Ouhout and Blinkblaar. Woody climbers or lianas including the spectacular Poison rope festoon the trees. The forest floor has a wealth of small flowering shrubs, herbs, grasses and ferns. Many fascinating and brightly coloured fungi grow on the tree trunks (bracket fungi) and in the decaying leaf litter (mushrooms and toadstools).

These forests were historically logged for timber from the 1800s to the 1940s and old sawing pits are often found. Present day threats to these forests on a provincial scale are uncontrolled fires which destroy the forest margin buffer and illegal over-harvesting for traditional medicine and building materials. Climate change is also predicted to have an effect.

These forests are home to many important **animal** species, including populations of the threatened Cape Parrot. Also to be seen and heard are the Bush Blackcap, Knysna Turaco, Olive Woodpecker, Grey Cuckooshrike, Chorister Robin-Chat, White-starred Robin and many others. The mournful calls of tree hyrax can sometimes be heard at dawn and dusk from the cottages, and blue duiker, bush buck and bushpig are occasionally seen in the forest.

Mistbelt forests are home to many of our largest and showiest butterflies such as the huge Emperor Swallowtail, the elusive Bush Beauty and the Short-tailed Admiral. Most forest butterflies are canopy dwellers, but they may be seen in clearings and along paths, and especially in grassy hills near the top of the forest

There are two clearly marked trails through the forest above the trout cottages. Some of the trees have labels with their botanical and common names.

Field guides with more detailed information include

Trees: *Pooleys Trees of eastern South Africa*. 2010. Boon, Richard. Flora & Fauna Publications Trust, Durban. ISBN 978-0-620-46019-4.

Wildflowers: A Field Guide to Wildflowers KwaZulu-Natal and the Eastern region. 1998. Pooley, Elsa. The Flora Publications Trust, Durban. ISBN0-620-21500-3.

Butterflies: Field Guide to Butterflies of South Africa. 2005. Woodhall, Steve. Struik Publishers, Cape Town. ISBN 1 86872 724 6.

### Buddleja salviifolia

### Quilted sagewood, iloshane

#### Buddlejaceae (Wild elder family)



- This shrub or small tree is usually found on forest margins
- Multi-stemmed with greyish brown stringy bark
- Leaves soft, grey or grey-green, wrinkled or quilted with sunken midrib, paler beneath with raised veins, margin scalloped
- Flowers small, white grey or purple with orange throat in large heads
- Flowers sweetly scented August to October
- Leaves browsed by game
- Wood used for spear shafts and fishing rods
- Tea made from dried leaves
- Grows easily, frost resistant. Good for hedging.
- Host to the larva of the African Leopard butterfly
- The flowers attract many adult butterflies who feed on the nectar

There are lots of Sage wood trees at the beginning of the trail at the forest entrance

### Calodendrum capense

### Cape chestnut, umemezomhlophe Rutaceae (Citrus family)



- The pink patches seen from afar in the canopy of mistbelt forests in early summer are Cape chestnut trees in flower
- These trees can reach heights of 25 meters
- The trunk is straight and buttressed with smooth grey bark
- The large leaves are shiny dark green with scattered gland dots
- Crushed leaves have a citrus smell
- The beautiful flowers are pink and white with maroon dots and are borne in profusion
- The knobbly fruit is roundish and splits into 5 lobes
- Seed is eaten by Cape Parrots and Samango monkeys
- Larvae of swallowtail butterflies feed on the leaves
- The wood is used for furniture, and the bark in traditional cosmetics
- It is easily grown from fresh seed but needs some protection from frost when young

### Celtis africana

### White stinkwood, undwandwazane

#### Celtidaceae (White stinkwood family)



- This is a tall canopy tree which grows up to 25 m
- The trunk is straight smooth grey bark and buttressed in mature trees
- New leaves are a pale light green when they emerge in spring
- The leaves have 3 distinct mid veins from an asymmetric base and are serrated in the upper two-thirds
- Flowers are small and greenish yellow
- Bears large numbers of small round yellowish fruit
- Seed is eaten by Cape Parrots and Samango monkeys
- Caterpillar larvae feed of swallowtail butterflies feed on the leaves
- The wood is pale coloured and used for furniture and implements
- Newly sawn wood smells unpleasant hence the common name
- Grows easily from seed and is a good garden tree in larger gardens

### *Clausena anisata* **Perdepis, horsewood, isifudu** Rutaceae (Citrus family)



- This tree has a potent unpleasant smell when touched hence the common name of 'perdepis'!
- A small tree up to 10m in forests
- The leaves are compound (made up of several small leaflets)
- Sprays of creamy white flowers are borne in August to October
- Fruit are small and round and ripen through red to black-coloured
- It is an important butterfly food plant
- The wood is used in traditional medicine for a number of complaints including fever, tapeworm and rheumatism
- Grows easily from seed and makes an attractive garden plant

### Dais cotinifolia

### Pompon tree, intozane

#### Thymelaeaceae (Fibre bark family)



- Shrub or small tree up to 7m in forest and on margins
- Bark smooth pale grey and tears off in long strips
- Leaves bluish green, smooth and slightly waxy
- Flowers are dense pompon-like pink clusters covering the tree in spring and early summer
- The bark is stripped, plaited and used for rope and whips
- Beautiful ornamental tree which grows best in the sun. It has been grown in Europe since the 1700s

A pompon tree grows at the top of the forest trail as it emerges into the grassland.

## Diospyros whyteana

### Bladder nut, umanzimane

#### Ebenaceae (Ebony family)



- A neat, glossy evergreen tree which grows to 10m
- The small shiny green leaves are fringed with soft russet hairs
- The sweetly scented creamy white flowers appear in August to November
- The inflated papery fruit case is reddish brown and encloses a red fruit
- The fruit is loved by birds
- The heavy pale wood is used for implement handles
- A good garden subject which can be used for hedging and is an excellent bonsai subject

### Halleria lucida

### Tree-fuchsia, unondomela

#### Scrophulariaceae (Snapdragon family)



- A smallish tree up to 12m with drooping foliage
- Often multi-stemmed with flaky, fissured bark
- Leaves are thinly leathery with a long, pointed tip
- Flowers are red and tubular and grow in clusters from the trunk and branches
- Flowering takes place through the autumn and winter months from April until August
- The fruit ripens black and is sweet tasting
- Birds, especially sunbirds, visit the tree to feed on the copious nectar
- Birds and mammals eat the fruit
- Used in traditional medicine for skin and ear complaints, and as a protectivel charm against evil
- A very popular garden plant

### *Leucosidea sericea* Ouhout, umtshitshi Rosaceae (Rose family)



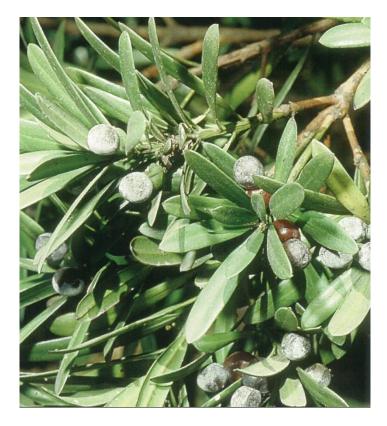
- A small silver-grey tree on forest margins and along streams
- Bark dark grey, rough and flaking
- Leaves green to grey-green with toothed edges and aromatic when crushed
- Flowers small, yellowish borne in spiky clusters from July to November
- The wood is often used for fence posts
- Ouhout can become a problem by invaded overgrazed areas of grassland
- It has the common name of 'Ouhout' as the trees always look aged
- Grows easily from seed as a hardy garden plant

Leucosidea trees are common around the Bosch Berg dams and in the forest margins

### Podocarpus latifolius

### Broad-leaf yellowwood, Umsonti

#### Podocarpaceae (Yellow-wood family)



- Straight-stemmed tree up to 30m
- Bark longitudinally fissured
- Leaves thick and leathery
- New leaves in spring are pale greyish-mauve
- Fruit grey to purple on fleshy reddish receptacle July to September
- Fleshy base of seeds eaten by monkeys, birds and bushpigs
- Host to epiphytic orchids
- Wood is pale yellow, fine-grained, seasons and saws well and was widely used for furniture, floors and ceilings.

There are several large specimens of this tree along the rabbit trail.

### Prunus africana

### Red stinkwood, inyazangomelimnyama, nkokhokho)

Rosaceae (Rose family)



- Medium to large evergreen tree
- Bark rough, dark brown, cracks into blocks
- Leaves smooth, shiny dark green with pink grooved stalks
- Small white flowers in dense sprays in summer
- Fruit round, purplish-brown, eaten by birds
- Crushed parts smell of bitter almonds
- Conservation status VULNERABLE due to over-harvesting of bark by traditional healers
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### Rhamnus prinoides

### Blinkblaar, shiny-leaf, umnyenye

#### Rhamnaceae (Buffalo-thorn family)



- Scrambling tree on forest margins
- Multi-stemmed with corky bark
- Leaves very shiny, dark green, hair pockets
- Small greenish flowers
- Fruit small, round, red to purplish black on long stalk
- Food plant of the Forest King Charaxes larvae

### Rothmannia capensis Candlewood, isiqathankobe Rubiaceae (Gardenia or coffee family)



- Small to medium tree
- Main stem slender and erect with finely square textured bark
- Leaves opposite, leathery, wavy with hairy pockets\*
- Flowers white to creamy with maroon streaks, strongly scented
- Fruit green, round, faintly ridged,
- Fruit eaten by duiker, bushbuck, bushpig, monkeys and baboons
- A beautiful small tree for gardens

### Scutia myrtina Cat thorn, usondela

#### Rhamnaceae (Buffalo-thorn family)



- Scrambling shrub or climber in forest
- Multi-stemmed with corky bark
- Sharp hooked spines below leaves
- Dense clusters of white or cream sweetly scented flowers from October to March attract butter flies and birds
- Berry-like, juicy red to purple fruit is astringent and dries the mouth
- The leaves are browsed by game
- Scutia myrtina is the food plant of the Forest King Charaxes larvae

There are some very large specimens (estimated to be about 300 years old) of this climber along the rabbit trail.

### Strophanthus speciosus

# Forest poison Rope, Bobbejaantou, umhlazazane

#### Apocynaceae (Milkweed family)



- Scrambling shrub or climber in mistbelt forest with watery sap
- Leaves 3-whorled, dark glossy green with raised veins
- Flowers September to December, sweetly scented, yellow to orange coloured with very long petal lobes
- Fruit paired 'bokhoring', seeds with white hairy 'parachute' tufts to help dispersal
- Reputedly poisonous
- Powdered root used traditionally to treat snakebite.

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### Please add any interesting sightings and/or suggestions so that we can improve and develop this booklet.

I f you have photographs that you would like identified please email to <a href="mailto:johnsoni@botanicalsociety.org.za">johnsoni@botanicalsociety.org.za</a> or post on <a href="mailto:www.ispot.org.za">www.ispot.org.za</a>