

A REGIONAL BOTANIC GARDEN

Telling the understorey

STAGE 1

STAGE 1: EUCALYPT SPECIES PLANTED ON LOT 100 IN 2009

- 1

E. MACRORHYNCHA - RED STRINGYBARK. On dry well-drained hilly sites to 1000 m. Medium-size, compact rounded crown, less so on poor sites.
- 2

E. ROSSII - SCRIBBLY GUM. Usually on dry skeletal soils of sedimentary or granite origin on hillslopes or ridges at 250-900 m. Moderate size, with irregular branching habit on harsh sites; taller on better soils.
- 3

E. MANNIFERA - BRITTLE GUM. Mainly on relatively poor soils derived from granite and sedimentary rocks. Small to medium-size tree. Considerable variation in leaf and growth habit.
- 4

E. NORTONII - LARGE FLOWERED BUNDY. Occurs on poor skeletal soils mainly in foothills but also up to 1000 m in the tablelands. Small to medium-size, often poorly formed with crooked trunk and large crown.
- 5

E. ALBENS - WHITE BOX. Favours fairly fertile soils on gentle slopes and plains; also on steeper, dry slopes. Small to medium-size with large, branching crown.
- 6

E. DIVES - BROAD-LEAVED PEPPERMINT. Usually in relatively dry hill country on poor shallow soils. Small (rarely moderately tall - 25 m), low branching and spreading habit with large crown.
- 7

E. BRIDGESIANA - APPLE BOX. Found on gentle slopes at moderate altitudes; favours relatively heavy alluvial soils. Medium-size, with relatively short trunk, large spreading crown with pendulous branchlets.
- 8

E. RUBIDA - CANDLEBARK. Mainly on dry and shallow soils of foothills and tablelands, up to 1400 m in mountain areas. Usually of moderate size varying from small and poorly formed to tall and straight with dense crown.
- 9

E. BLAKELYI - RED GUM. Favours compact loams on gently undulating sedimentary terrain or exposed granite. Medium-size with short trunk and large crown.
- 10

E. DALRYMPLEANA - MOUNTAIN GUM. Frequent in lower montane-subalpine forests at 700-1500 m. Medium-size tall tree, with a straight trunk and large crown.
- 11

E. DELEGATENSIS - ALPINE ASH. On well-drained rocky slopes and in deep valleys at 900-1400 m. Often confined to mountains with snow. Tall and straight with a fairly open crown.
- 12

E. VIMINALIS - RIBBON GUM/MANNA GUM. Widespread. On moist well drained alluvial soils near watercourses but also on drier sites at higher elevations and tablelands. Variable in size and growth, with narrow, pendulous leaves.
- 13

E. POLYANTHEMOS - RED BOX. Mostly on shallow soils of sedimentary origin on hillsides and gullies or open flats (deep loamy soils) up to 650 m in foothills. Small to medium-size, often with crooked form and distinctly greyish crown of ovate leaves.
- 14

E. MELLIODORA - YELLOW BOX. Usually in the foothills to tableland country, favouring better quality loam on relatively low slopes. Medium-size with a large, rounded, fine-textured crown.
- 15

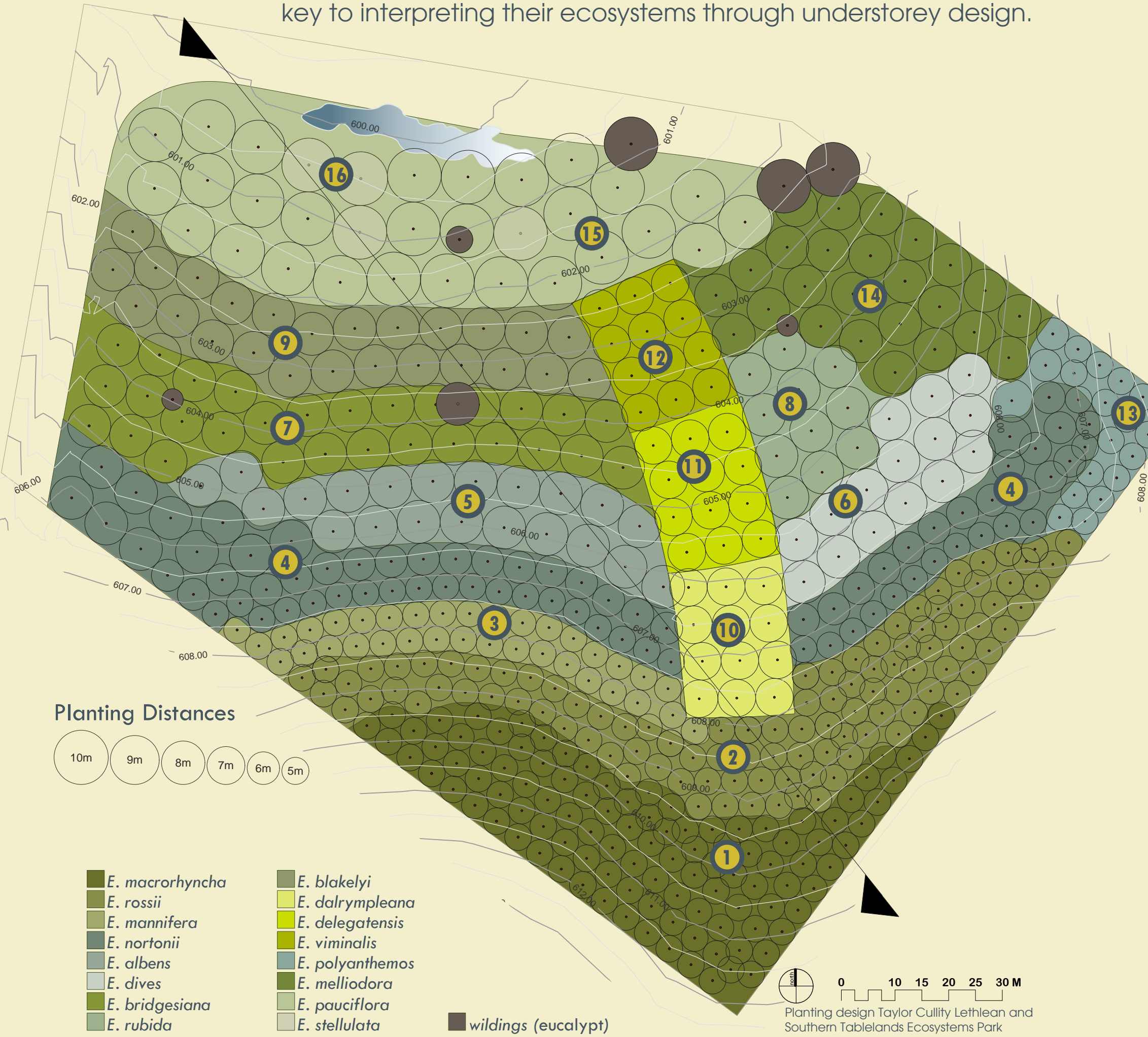
E. PAUCIFLORA - SNOW GUM. Mainly in pure stands in low open forest formation at subalpine elevations, mixed stands on the tablelands. Varies in size and growth from stunted shrub to medium-size tree, usually with acrooked low-branching trunk.
- 16

E. STELLULATA - BLACK SALLEE. Mostly in low subalpine woodlands, high plains and tablelands at 800-1700 m; rarely lower; localised on poorly drained flats and depressions. Small tree, with trunk usually dividing near the ground, spreading branches and a fairly dense crown.

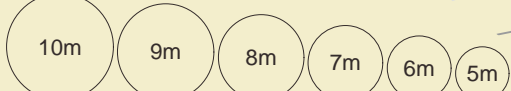
Interactions with the landscape



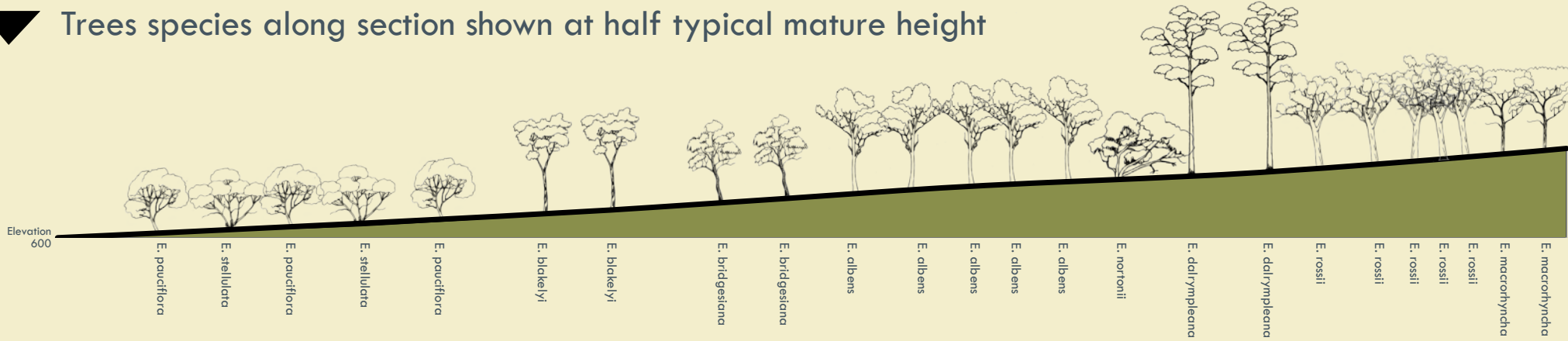
Where and how plants grow is affected by many factors including climate, elevation, slope, aspect, soil, interactions between species (plants and animals) and site disturbances such as fire, flood and human behaviour. The resulting physical structure (height, spread, etc) of the vegetation and the species composition are features useful in classifying vegetation. Looking at where the trees on Lot 100 occur naturally in the landscapes of the Southern Tablelands provides the key to interpreting their ecosystems through understorey design.



Planting Distances



Trees species along section shown at half typical mature height



SOURCE: LEON COSTERMANS NATIVE TREES AND SHRUBS ... 2009

WHERE THESE EUCALYPTS MAY BE FOUND AS INDICATIVE SPECIES IN THE LANDSCAPES OF THE SOUTHERN TABLELANDS

Montane Wet Sclerophyll Forests
Elevation 800-1400 m. Mist, frost and occasional snowfalls in winter. Characterised by steep, moist terrain, rocky loams of moderate fertility. Trees typically 20-35 m tall with sclerophyllous and mesophyllous shrubs beneath and open herbaceous groundcover.

Southern Tablelands Wet Sclerophyll Forests
Elevation 600-1000 m. Rainfall 750-1300 mm. Moderately sloping hills and valleys, occasional steep slopes and gorges. Soils are clay-loams derived from shales or basalts, sometimes heavier soils from limestone. Eucalypts 20-35 m dominate open forests with understorey of variable density of shrubs and continuous diverse herbaceous groundcover.

Montane Bogs and Fens
Elevation 600-1500 m. Rainfall 850-1500 mm. Few trees. Bogs, dominated by sclerophyllous shrubs and rhizomatous sedges, are found on very acidic poor peaty soils. Fens, dominated by dense soft-leaved tussocks and grasses, some semi-aquatic herbs but few shrubs, occur in alkaline to slightly acidic, rich peats.

Southern Montane Heaths
Elevation 600-1200 m. Characterised by cold conditions tolerated only by heath vegetation on skeletal stony soils derived from hard quartzites, slates and schists. Dominant species is *Allocasuarina nana* (~1 m tall), with occasional lone trees. Beneath the dense casuarina canopy is a sparse ground cover of grasses, sedges and forbs.

Southern Tablelands Dry Sclerophyll Forests
Elevation 600-1100 m. Undulating terrain, stony ridges, gorges and ranges characterised by dry eucalypt forests with open, species-poor sclerophyll shrub understorey interspersed with open groundcover of tussock grasses. Trees typically 15-20 m tall on shallow rocky infertile soils derived from sandstone, mudstones, granites and porphyry volcanics.

Upper Riverina Dry Sclerophyll Forests
Elevation 300-700 m. Steep to flat terrain, with soils of moderate fertility derived from granite and metamorphosed siltstones, supporting dry eucalypt forests with trees up to 20 m tall, an open sclerophyllous shrub understorey and patchy groundcover of grasses.

Subalpine Woodlands
Elevation 1000-1800m. Occasional winter snowfalls, more frequent at higher altitudes. Dominated by one or two species of eucalypts 5-15 m in height in frost hollows on mountain slopes and summits exposed to cold winds. Variable understorey of sclerophyllous shrubs, tussock grasses and various herbs.

Tableland Clay Grassy Woodlands
Elevation 700-1300 m. Rainfall 550-900 mm. On rich alluvial creek flats or fertile clay-loam soils derived from basalt. Trees grow to 30 m on favourable sites, or to half this on exposed sites and frost hollows. Open canopy permits dense and diverse ground cover dominated by tussock grasses and herbs. Few shrubs.

Southern Tablelands Grassy Woodlands
Elevation > 600 m. Rainfall 550-900 mm, occasional snowfalls. Hilly undulating terrain, loamy soils moderate fertility derived from fine-grained sediments and granites. Trees typically 15-30 m tall, sparse layer of shrubs with continuous grassy groundcover with herbs.

- WET SCLEROPHYLL FORESTS

FRESH-WATER WETLANDS

HEATH-LANDS

DRY SCLEROPHYLL FORESTS

GRASSY WOODLANDS

