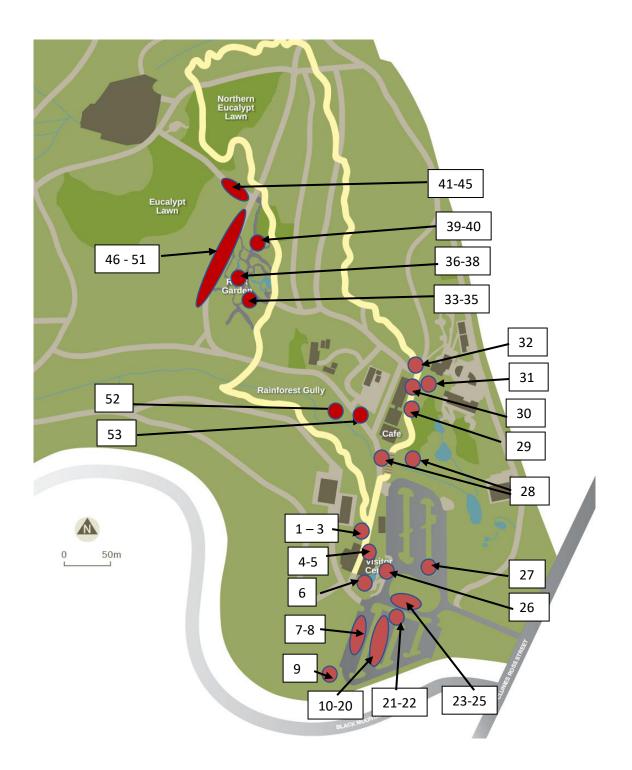


Acacia grandifolia

Burnett Wattle

GUIDES' NOTES

Prepared by Mary Bush and Linda Beveridge



Note: Select from all numbers in fine weather, but do use <u>numbers 1 to 32</u> if gardens are partially closed because of bad weather.

MAP LEGEND

No. Name

- 1 A. cognata "Green Mist"
- 2 A. boormanii
- 3 A. cultriformis "Cascade"
- 4 A. pubescens
- 5 A. aphylla
- 6 A. pycnantha
- 7 A. cardiophylla "Gold Lace"
- 8 A. triptera
- 9 A. baileyana
- 10 Acacia sp
- 11 A. stenophylla
- 12 A. cardiophylla "Gold Lace"
- 13 A. pendula
- 14 A. baileyana
- 15 A. cardiophylla
- 16 A. aneura
- 17 A. bulgaensis
- 18 A. aneura
- 19 A. baileyana
- 20 A. cultriformis "Cascade'"
- 21 A. loderi
- 22 A. grandifolia
- 23 A. genistifolia
- 24 A. paradoxa
- 25 A. penninervis
- 26 A. ingramii

No. Name

- 27 A. filicifolia
- 28 A. melanoxylon
- 29 A. cognata "Limelight"
- 30 A. leprosa 'Scarlet Blaze'
- 31 A. buxifolia
- 32 A. alata
- 33 A. pterocaulon
- 34 A. araneosa
- 35 A. pravissima "Kuranga Cascade"
- 36 A. cognata
- 37 A. leprosa "Scarlet Blaze"
- 38 A. aneura var aneura
- 39 A. trigonophylla
- 40 A. aneura
- 41 A. parvipinnula
- 42 A. ulicifolia
- 43 A. oshanessii
- 44 A. covenyi
- 45 A. dealbata 'Kambah Karpet'
- 46 A. havilandiorum
- 47 Vachellia caven
- 48 A. pteraneura
- 49 A. silvestris
- 50 A. cognata
- 51 A. boormanii
- 52 Callicoma serratifolia
- 53 A. coriacea subsp pendens

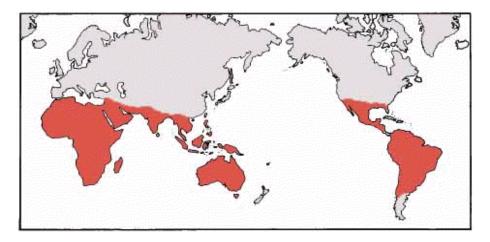
Note: Select from all numbers in fine weather, but do use <u>numbers 1 to 32</u> if gardens are partially closed because of bad weather.

<u>Theme:</u> "Green and gold or green and cream": Acacia flowers, foliage, and fruit.

BACKGROUND INFORMATION -

SOME BOTANY

Acacia is Australia's biggest genus – about 1100spp – and there are acacias in all states and mainland territories. Until the genus *Acacia* was split into five genera, there were about 1500 species with a Gondwanan distribution.



It had been proposed that most of the Australian species would become *Racosperma*, but successful lobbying by Australian taxonomists resulted in *Acacia* being retained for Australian species, contrary to the usual taxonomic rules. This decision was made at the International Botanical Congress in 2005, then, after further debate, finally ratified at the 2011 IBC.

Now virtually all members of the genus *Acacia* are native to Australia and virtually all Australian wattle species belong to *Acacia*. There are seven species of *Vachellia* in Northern Australia and two species of *Senegalia*, the other two major genera.

Vachellia nilotica, the original type species for *Acacia*, is native to Africa, the Middle East and the Indian subcontinent. It has prominent stipular spines up to 60mm long, as does the African thorn tree, *Vachellia erioloba*. The name Acacia means something like sharp or pointed. The strange situation now is that the plants of the genus *Acacia* generally don't live up to their name! Note there is a specimen of *Acacia paradoxa* on the southern edge of sect. 175, near the driveway into the gardens, that has quite sharp, though small, stipular spines. Also, *Acacia alata* has tiny stipular spines as well as having the phyllodes ending in little spines.



Vachellia- large, sharp, stipular spines. Vachellia nilotica

Senegalia – prickles (as are the "thorns" of roses). Senegalia greggii



Acacia -from "acis' meaning sharp point, tip, thorn or barb in Greek

Foliage

- **Leaf**: an organ for a vascular plant specialising in photosynthesis, typically consisting of a leaf blade and a petiole
- **Petiole**: a slender stalk by which a leaf blade is joined to the stem; a leaf stalk
- **Phyllode**: a (generally) larger petiole resembling and having the function of a leaf blade
- **Cladode**: a modified, usually flattened, stem which performs the function of a leaf blade.

Leaves vary greatly in size: *A. elata*, in *Acacia* section 1 in from upper eucalypt lawn, has bipinnate leaves up to ca 30cm long, while in *A. pubescens* (Banks Walk) they are tiny.

- **Bipinnate**: This means twice divided: Not a simple leaf blade, not just divided into several leaflets like a rose leaf, but with each primary leaflet (pinna) further divided into a number of secondary leaflets, called pinnules. As I understand it, all *Acacia* seedlings start off with bipinnate leaves, but the majority of Australian species change over quickly to phyllodes, modified, usually flattened, petioles (leaf stalks).

Phyllodes, too, vary enormously in size and shape – e.g. small in *A. boormanii*, Banks walk, and *A. ulicifolia* in Sect. 18, cf elephant ear wattle, *A. dunnii*, whose phyllodes measure 20-45x6-16cm.

Adaptation: Phyllodes are possibly an adaptation to drought and to low phosphate soils. They are more likely to have heavy cuticles and they have fewer stomates. While phyllodinous species can be found in rainforest (e.g. *A. melanoxylon*), you don't find bipinnate species in arid areas. This contrasts with former acacias elsewhere in the world, including those in harsh environments, which are all bipinnate.

Stipular spines: Many plants have stipules of one sort or another in pairs at the base of the petiole (leaf stalk). They can take the form of glands, scales, hairs, spines or leafy structures. Check out a rose leaf, for example. In Vachellia, they are quite savage spines.

Flowers – The tiny flowers in round or elongated inflorescences (balls or rods) do have petals but it is the stamens that are obvious. The balls can have as few as three or four flowers (*A. myrtifolia* and *A. alata*) or up to 100s. The balls can appear singly in leaf axils or in racemes or panicles (e.g. *A. pycnantha*).

- **Axil**: the angle between the upper side of the leaf or branch and the stem.
- Panicle: a loose branching cluster of flowers (or here, of balls of flowers)
- **Raceme**: a flower cluster with the separate flowers (or balls) attached by short equal stalks at equal distances along a central stem. The flowers at the base of the central stem develop first.

Longevity: Most wattles are fairly short lived, those growing for 30 years or more being considered a longer-lived species. However, *A. aneura* and some other arid area species can live for 200 - 300 years or more.

IMPORTANCE OF ACACIAS

Acacias are more or less dominant in many arid areas, with plant communities named for them, such as the Mulga (*A. aneura*) and the Brigalow belt (*A. harpophylla*). Species occur in plant communities ranging from desert to rainforest and in all States and Territories.

Symbolically and culturally:

- Coat of arms
- Acacia pycnantha, Golden Wattle, was made the official floral emblem for Australia in 1988. It occurs naturally in NSW, Vic. and SA
- Order of Australia medals depict a wattle blossom.
- Wattle Day was first celebrated on 1 September 1910 and became the official nationwide day in 1992. For much of the twentieth century NSW celebrated Wattle Day on 1 August and other states also had different days.
- The national colours of Australia are green and gold. They were established by the Governor-General of Australia, Sir Ninian Stephen, on 19 April 1984 in the Commonwealth of Australia Gazette, on advice from Prime Minister Bob Hawke. The gold colour represents the golden wattle, which is Australia's national flower.
- Green and gold sporting colours.
- Popular garden plants.
- Poetry: Adam Lindsay Gordon, Dorothea Mackellar, Henry Kendall, Henry Lawson and many others.
- Ornamental uses in needlework, china etc.

- The Acacia Appreciation Club of Hiroshima has given ribbons every year since 1992.
 - (A. dealbata first to grow after the atomic bomb)
- *Chronicle* newspaper 29 August 2006 "Acacias were invaluable to both settlers and indigenous people. The sap of some made gum arabic (dyeing, ink making, mucilage), while others were valued as medicines and soaps, dyes, and bark for tanning; perfumes, fibre, and wood for fuel."

Uses:

- <u>Timber</u>, notably *A. melanoxylon*, used for fine furniture, joinery and flooring as well as other things including sounding boards in musical instruments. Also *A. harpophylla*, Brigalow, for small heavy construction (posts etc) and furniture and turnery; *A. rhodoxylon*, *Spear Wattle*, *for fence posts*, *fancy turnery*, *r*esonating parts of xylophones, fingerboards and chin rests for violins (a substitute for ebony), https://www.daf.qld.gov.au/forestry/using-wood-and-its-benefits/wood-properties-of-timber-trees/spearwattle.
- Wood of Mulga used for shields, digging sticks etc.
- <u>Fuel wood</u> overseas use
- <u>Shade trees</u> Indian tea plantations
- <u>Tannins</u> Aboriginal use as fish poison. C19: several species used in tanning (*A. dealbata, A. mearnsii* and *A. pycnantha*)
- <u>Food</u> Seeds of certain species used for food Aboriginal society, current trendy food additive.
- Many other uses by Aboriginal people: medicinal, adhesives, tools.
- <u>Festival in France:</u> A fabulous and fun Mimosa Festival in France heralds the arrival of spring on the French Riviera. *Acacia dealbata* was imported from Australia in 1839, and has since taken over the slopes of the Tanneron. It thrived and became important to the local economy. It is now cultivated and the cut flowers are sold throughout France and abroad.

GUIDED WALKS

Introduction

Theme: Green and gold or green and cream: Acacia flowers, foliage and fruit.

How have we heard about Acacia?

Our largest genus. Species occur throughout Australia, in all states and territories, from north to south and from rainforest to desert.

Australia's Coat of Arms

National floral emblem is A. pycnantha (Golden Wattle) declared in 1988.

National colours, green and gold: the gold colour represents the golden wattle, which is Australia's national flower.

Choosing the route: This has been designed to allow space for social distancing when stopping to talk with visitors. It is deliberately too long for a single walk but a wealth of southern car park wattles has been included to cater for the possibility of the Gardens being partially closed due to bad weather.

WALK: START AT THE CLOCK

Site, Map no.	Plant	Comments
R	Acacia cognata	Dwarf weeping cultivar of <i>A. cognata.</i>
	"Green Mist"	Wild: Generally erect shrub to 2.5 m high and 2 m across. Woodland and mallee.
(1)		NSW and Qld.
		Upright form later in walk (S15h, top of Rockery)
R	A. boormanii	Rounded shrub to 5 m high and 2-3 m diameter. often suckers; long lived (>30
	Snowy River Wattle	years) An outstanding wattle in flower.
(2)		Eucalyptus woodlands and open forest at higher altitudes. NSW near Cooma;
		Thredbo to Buchan. Also, north eastern Vic.
		Named after first collector, Boorman, 1913 Macanally Mtn, N of Numeralla
S210	A. cultriformis	Prostrate cultivar.
R	"Cascade"	Wild: generally erect shrub to 2.5m high by 2m across. Woodland and mallee,
(3)	Knife Leaf Wattle	eastern NSW and south east QLD
L	A. pubescens	Bipinnate leaves
At top	Downy wattle	Vulnerable, Sydney region. Found in dry sclerophyll forest and woodland.
of stairs		Grown in Empress Josephine's garden at the Chateau de Malmaison.
(4)		
L	A. aphylla	Spiny, leafless erect and widely branching shrub 0.9m to 3m in height, 2m across.
In pot	Leafless Rock	The thickened wiry stems photosynthesise like leaves, greatly reducing the total
next to	Wattle,	surface for water loss by transpiration.
VC	Twisted Desert	Balls of 20-30 light golden yellow flowers occur, one per axil,
(5)	Wattle, Live Wire	between August and October in native range.
		Endemic to an area east of Perth in Western Australia. Exact location withheld for
		conservation reasons. Vulnerable

BANKS WALK: Walk along the Banks Walk towards the Visitor Centre

DOWN STEPS S323

Site, Map no.	Plant	Comments
R	А.	Australian floral emblem (gazetted 1988 but used for Wattle Day since 1910)
(6)	pycnantha	Prominent extra-floral nectary on phyllode produces nectar attractive to birds which brush
	Golden	against pollen and so aid cross pollination.
	Wattle	Grows as small understorey tree in Eucalypt forests, woodland, open scrub, heath
		Distribution: From inland southern NSW and ACT through Victoria to Yorke Peninsular and
		southern Eyre Peninsula, SA. Short lived (7-10 years) in cultivation.
		Originally collected by Mitchell in 1836 near Loddon R, Vic.
		Original specimen here in ANBG was planted in 1988 by Hazel Hawke.
		Bark a rich source of tannins; gum chewed to treat diarrhoea by settlers
		Weed species in parts of South Africa.

TURN RIGHT TO THE TOP LEVEL OF THE SOUTHERN CARPARK

Site,	Plant	Comments
Map no.		
L	A. cardiophylla	Prostrate form, along top carpark
(7)	"Gold Lace"	Usual form (see (15)): shrub to 2-3m high, spread to 3m. Often has multiple stems.
	West Wyalong	Grows in eucalypt woodland and mallee communities, in level red sandy earths and
	Wattle,	shallow stony ridge soils.
	Wyalong Wattle	NSW: Gilgandra, south and west to Wagga Wagga and Lake Cargelligo area
L	A. triptera	Phyllodes have a broadened leaf base running down the stem.
(8)	Spur-wing	Queensland and NSW on sandstone and gravel ridges; rare in Victoria
	Wattle	

WALK ALONG AND TURN LEFT DOWN TO THE NEXT LEVEL

Site,	Plant	Comments
Map no.		
On corner	A. baileyana	Usually small tree or large shrub to 10m high by 6m across.
R	Cootamundra	NSW, near Cootamundra. Naturalized in other areas where it is a declared
(9)	Wattle	environmental weed.
		Two foliage forms are in cultivation. One has purplish young leaves and is known as
		A. baileyana var purpurea, the other has yellowish tips.
On corner	Acacia sp	
L (10)		
L	A. stenophylla	Fast-growing tree to 4–10 metres tall. Dominant along watercourses of Murray-
(11)	Many common	Darling basin.
	names! (See	Common names: Balkura, Belalie, Black Wattle, Dalby Myall, Dalby Wattle, Dunthy,
	right)	Eumong, Gooralee, Gurley, Ironwood, Munumula, Native Willow, River Cooba and
		River Myall
L	A. cardiophylla	Prostrate form. Cascading down retaining wall from upper level.
(12)	"Gold Lace"	See notes above.
	West Wyalong	
	Wattle	
R	A. pendula	Note rich stringy bark patterns. Pendulous tree to 10m, usually upright, occasionally
(13)	Weeping Myall	spreading. Balls of yellow flowers occur in spring.
R	A. baileyana	Prostrate form.
(14)	Cootamundra	Usually small tree or large shrub to 10m high by 6m across. See notes for (9).
	Wattle	
R	A. cardiophylla	The usual upright shrub 2-3m high, spread to 3m. Often has multiple stems.
(15)	West Wyalong	Grows in eucalypt woodland and mallee communities, in level red sandy earths and
	Wattle,	shallow stony ridge soils
	Wyalong Wattle	NSW: Gilgandra, south and west to Wagga Wagga and Lake Cargelligo area
R	A. aneura	Looking rather old and declining but usually very long lived. Unless main gardens are
(16)	Mulga	closed, talk about this in Rock garden. See notes for (38) and (40)
R	A. bulgaensis	Shrub or small tree to 6 m high or sometimes taller
(17)	Bulga Wattle	Rods of bright yellow clusters of flowers September to March.
	-	Rare, SW of Singleton, NSW, in Sclerophyll woodland and forest.
R	A. aneura	See notes for (38) and (40)
(18)	Mulga	

R	A. baileyana	Prostrate form.
(19)	Cootamundra	Usually small tree or large shrub to 10m high by 6m across. See notes for (9).
	Wattle	
L	A. cultriformis	Cascading over wall not far from steps. Generally erect shrub to 2.5m high and 2m
(20)	"Cascade'"	across, with grey triangular shaped phyllodes. Bears balls of golden flowers in spring.
	Knife-leaf	Woodland and mallee. NSW and Qld.
	wattle.	
R	A. loderi	Large shrub or small tree 3–8 m, erect or spreading habit. Named after its collector,
corner	Nelia or Nealie	assistant forester at Broken Hill A.C. Loder who collected it at Yancowinnia near
bed		Broken Hill in November 1907.
(21)		The A. loderi shrublands on western plains of NSW are an endangered ecological
		community. Also, SA and Vic.
		Common name derived from the Ngyiyambaa word for the species.
R	A. grandifolia	Tree to 8 m tall. Large phyllodes and long rods or spikes of golden yellow flowers which
(22)	Burnett	grow in pairs from the axis of the upper phyllodes. Grows in hilly terrain.
	Wattle	Endemic to small area in Burnett district of SE Qld, near Leichardt. Vulnerable

WALK ACROSS TAR ROAD, TURN LEFT ON THE FOOTPATH

Site,	Plant	Comments
Map no.		
R	A. genistifolia	Spreading shrub to 2m x 2m
(23)	Early Wattle	Note pointed phyllodes, balls of creamy flowers which occur in winter and early spring.
		NSW, ACT, Vic and Tas in open forest and heath.
		Very hardy species which flowers in the off-season
R	A. paradoxa	Stipular spines, sharp but tiny compared to Vachellia.
(24)	Kangaroo	Spreading, prickly shrub 2-3m high by 3-4m across. Balls of yellow flowers.
	Thorn	Widely distributed in NSW except far west, plus Qld, Vic, WA & SA.
		Excellent hedge species. Very hardy.
R,	A. penninervis	The new type species since splitting of genus Acacia into five genera.
around	Mountain	Coast, tablelands and western slopes of NSW, also QLD, ACT and Vic. in dry sclerophyll
corner	Hickory Wattle	forest and woodland.
(25)		

NEAR FLAG POLE

Site,	Plant	Comments
Map no.		
Outside	A. ingramii	The shrub or small tree typically grows to a height of 2 to 6 m and has a spreading
Visitor Centre	Ingram's	bushy habit. ^[2]
(26)	wattle	Grows mainly in low woodland or open forest in escarpment gorges on the NSW
		Northern Tablelands.
		The specific epithet honours Cyril Keith Ingram who first recognised it as a new species
Looking down	A. filicifolia	A shrub or tree, 3-14 m with bipinnate leaves resembling fern fronds.
slope, tall tree	Fern-leaved	Spherical heads of yellow or bright yellow flowers from autumn to late spring
at end of 2nd	wattle	Native to NSW north from Bateman's Bay on coast, tablelands and some western
bed. (27)		slopes, also Qld.

AT CAFÉ BRIDGE

Site, Map no.	Plant	Comments
L	А.	Point out the tall A. melanoxylon near the end of the Bridge .
(28)	melanoxylon	Several A. melanoxylon of different ages alongside the steps.
	Blackwood,	Fairly long lived and one of the tallest wattles, reaching 30m in deep gullies, found mainly
	hickory, sally	in wet sclerophyll forest and into cooler rainforest. Balls of cream flowers in spring, not
	wattle,	very obvious.
	lightwood,	From QLD (Atherton Tableland) to NSW, ACT, VIC, TAS, AND SA.
	Mudgerabah,	A very hardy shade or shelter tree and an excellent timber tree - see general notes.
	Mooeyang,	Tannins in the bark made a good fish poison for Aboriginal use.
	Tasmanian	
	blackwood,	
	black wattle,	
	black sally	

Walk down a few steps below café, beside Tasmanian rainforest

Site, Map no.	Plant	Comments
R	А.	Good example of transition of young bipinnate leaves into mature phyllodes
(28)	melanoxylon	

Walk along pebblecrete path past the café to junction with path to Crosbie Morrison Building

NEAR ELLIS ROWAN

Site,	Plant	Comments
Map no.		
In pot	A. cognata	A compact form of A. cognata, which we will see later
(29)	"Limelight"	Height 0.5 m to 1 m, width 1 m to 1.2 m. Foliage plant with its graceful weeping foliage.
	River	Small balls of yellow flowers appear in spring.
	Wattle	It can be prone to root rot in humid climates, where it may be short lived. It is at its best in
		the southern states.
		The naturally dense growth habit is great for deterring weeds and is low maintenance.
Look	A. leprosa	A small tree or large shrub, growing to 5 m high and 3 m wide
down	'Scarlet	'Scarlet Blaze' is a cultivar of A. leprosa, Cinnamon Wattle, which has pale or bright yellow
path to	Blaze'	flowers.
left		Original plant sighted in Black Range State Forest, NE of Melbourne. Propagated from
(30)		cuttings by Royal Botanic Gardens Melbourne (RBGM). All current plants derived from these.
		Plant breeders' rights to Bill Molyneux on behalf of the RBGM.
		Was Victoria's Centenary of Federation Floral Emblem.
		In common with all forms of Cinnamon Wattle, the cultivar releases a cinnamon-like scent
		from its foliage, particularly in hot weather: the phyllodes contain oil glands.
		'Scarlet Blaze' prefers moist, well drained soils but has been found to be drought tolerant.
		Flowering and growth are promoted by a position in full sun, but some shade is tolerated.
		'Scarlet Blaze' must be propagated by cuttings to produce true-to-type plants.
		Red flowers on Acacia are rare. A few red flowered species overseas are now all classified as
		Senegalia species One species of Acacia from NE Qld, A. purpureapetala, has mauve flowers.

In pot	A. buxifolia	In pot with semi-parasitic Quandong.
(31)	Box-leaved	Open erect shrub to 3m, spreading to 2m. Masses of small golden balls appear in spring.
	Wattle	Qld, NSW tablelands and western slopes, ACT and Vic.
		A hardy, desirable species.
R	A. alata	Collected Brown 1801 Albany
(32)	Winged Wattle	 Shrub to 2m high by 1m across. Phyllodes are almost reduced to cladodes, giving the appearance of winged stems. Each phyllode is extended into a spine. Two flower forms, this one cream, some others golden yellow. Just 3 or 4 flowers per ball. Extended flowering period. Variety of habitats - e.g. along creeks in forest, sand in coastal heath Coastal WA from north of Geraldton to Albany Widely cultivated in Europe in the nineteenth century.

TURN LEFT ONTO TAR ROAD

Walk up the tar to the rock garden. Walk up steps on left of waterfall pond.

Site,	Plant	Comments
Map no.		
R	А.	Much-branched, intricate, erect or sprawling shrub, usually 0.5-1.3, but up to 2m high.
(33)	pterocaulon	Winged phyllodes are continuous with the branchlets, splitting to form opposing wings
		along the branchlet with each one extending to the next underneath. Each wing about is 2 to 6cm wide.
		Flowers golden yellow globes, Oct to Dec or Jan. Each globular head contains 60 to 70 densely packed golden flowers.
		Southwest WA, inland, small area southeast of Geraldton. Rocky clay loam, sandy clay.
		Rocky hillslopes. It is often part of the under-storey in Eucalyptus woodland communities
		or in dense Casuarina scrub.
		Collected by botanist, Bruce Maslin, in 1976 near Three Springs WA. Formally described by him in 1995.
		Conservation code is priority one.
R	A. araneosa	In centre of rock garden with Grass Tree.
(34)	Spidery	(Whibley & Symon, 1992)
	Wattle,	Small, erect, wispy tree, 3–8 m high
	Balcanoona	Phyllodes are pendulous, sometimes up to 65cm long and only 1 to 2cm wide.
	Wattle	Flowers form large globular heads (balls) of 50–70 flowers, which are small, yellow and
		arranged in groups of five. Produced irregularly through the year.
		Restricted to a small area of northern Flinders Ranges in SA in dry open woodland of Curly
		Mallee.
		Vulnerable because of grazing and mining.
L	А.	Flowers (yellow), September, October, November.
(35)	pravissima	Wild: Ovens Wattle. Tall shrub to 6 m with pendulous branches. NSW, ACT and Victoria,
	"Kuranga	usually near streams and in moist sheltered sites; often in open eucalypt forest.
	Cascade"	Full sun to part shade in most soil types. "Kuranga Cascade" withstands dry conditions.

WALK OVER TOWARDS THE SUNDIAL NEXT TO THE ROCK GARDEN LAWN. Walk behind the bed that contains *A. araneosa* and turn right, over the little bridge towards the lawn

Site, Map no.	Plant	Comments
L (36)	<i>A. cognata</i> An old "Green mist" River Wattle	See notes to (1) (29) and (50)
L (37)	A. leprosa "Scarlet Blaze"	See notes to (30)
L, on corner (38)	A. aneura var aneura Mulga	One of 10 varieties of <i>A. aneura</i> recognised. A shrub or tree which grows from 4 m to 6 m in height. Phyllodes 3–9.5 cm long, 1–2 (<2.3) mm wide. Flowers in short rods, pods with resinous rim or rarely with wings to 0.4 mm wide. Species widespread in all mainland States except Vic., between 20° and 34° latitude, usually on shallow or gravelly soils on hills. See notes in next table (40)

SWEEP LEFT TOWARDS SUNDIAL. Look down slope to tall acacia

Site,	Plant	Comments	
Map no.			
R Beyond	А.	Multi-branched, pungent shrub 1m – 2.5m height, erect habit. Phyllodes are continuous	
sundial	trigonophylla	with branchlets forming narrow triangular wings 1cm to 6cm long, 1mm to 3mm wide.	
(39)		Balls of yellow flowers occur between August and November	
		It is found in swamps, hill-sides and among granite outcrops where it grows in sandy granitic or lateritic soils.	
		Endemic to WA. Mid-West, Wheatbelt, Peel and Great Southern regions (i.e.in south	
		west from Geraldton to Coolgardie, Albany way.)	
R	A. aneura	Shrub or tree to 18 m high, often multi-stemmed. Phyllodes are variable, narrow to	
(40)	Mulga	broad linear, greyish. Flowers are rod-like, yellow and occur in spring and other times,	
		depending on rain.	
		Upright branches and phyllodes channel any rain down trunk and deeper into soil. Note	
		also grey phyllodes, thick cuticles, upright orientation restrict water loss.	
		Arid areas QLD, NSW, SA, WA, NT. A. aneura is the commonest wattle in Oz - usually	
		south of 20°S latitude from Indian Ocean almost to Great Divide in central Qld and in	
		NSW	
		- often in pure stands forming shrublands (the mulga) or understory of open eucalypt woodlands	
		- provided aborigines with food (seeds and a sweet exudate), medicinal preparations,	
		resin for gluing and repairing wooden items and wood for tools, e.g. digging sticks and	
		shields and weapons, e.g. boomerangs and spears.	
		- tourist items of wood.	
		- foliage is a valuable source of fodder and shelter for animals.	
		- adaptations to drought	
		- Longevity, 200 - 300 years or more	
		"Mulga" is Aboriginal name for a narrow shield. Oodnadatta means 'mulga	
		flower'	

WALK ALONG UPPER PEBBLECRETE PATH AND UP THE STEPS UP TOWARDS THE EUCALYPT LAWN

Pause on tar road junction then walk part way up towards Eucalypt lawn

Site, Map	Plant	Comments
no.		
S18, R	А.	
(41)	parvipinnula	Bipinnate leaves. The shrub or tree typically 2 to 10 m tall and has an erect habit. It has
	Silver-	silvery to bluish grey smooth bark and angled to erect branchlets.
	stemmed wattle	Blooms between April and January producing simple pale-yellow inflorescences in both axillary and terminal panicles and racemes.
		It has a limited distribution in coastal areas of central New South Wales from around
		Singleton to around the Shoalhaven River where it is found in a variety of habitats
		growing in many different soil types as a part of dry sclerophyll forest or woodland communities.
S18, R	A. ulicifolia	Rounded shrub to 3m, often less with dark green spine-like phyllodes to 2cm.
(42)	Juniper	Flowers: pale cream coloured balls in winter and spring, usually April–October.
	Wattle,	Grows in dry sclerophyll forest and woodland, usually in sandy soil. Widespread on the
	Prickly Moses	coast and tablelands from north QLD, NSW, ACT, VIC, TAS.
		Hardy shrub with attractive foliage. Suitable as a hedge plant.
		Name refers to the gorse-like (genus <i>Ulex</i>) foliage. Common name 'Prickly Moses' could
		be derived from related N hemisphere genus <i>Mimosa</i> .
S3, Across	A. o'shanesii	Diffuse tree or shrub to 15 m.
road	Green Wattle	Found in high rainfall coastal areas of SE Qld and NE NSW in tall open forest and
(43)		rainforest.
S3, R,	A. covenyi	Multi-branched shrub to tall single-stemmed evergreen tree 6 to 7.5m tall.
when	Blue Bush	"Flowers are lemon coloured, produced in mass in early autumn, with black seeds
walking		maturing late autumn to early winter." (ANBG Growing native plants) Actually yellow, in
back down		spring! Grows in thickets mainly on limestone.
road		Endemic to NSW; Deua R to near Kybean - Bendethera Caves. Rare
(44)		Named after R. Coveny, a collector at RBG Sydney. Collected by Constable, 1966 Con
		Ck, Bendethera.
		Promoted for use in domestic gardens now that Cootamundra wattle is unavailable.
S3, at	A. dealbata	RB Hadlow, of ANBG. Collected at the Kambah Health Centre.
corner	"Kambah	Prostrate form of local native Acacia dealbata, Silver Wattle, which grows to 30 m in
(45)	Karpet"	dry sclerophyll forest and woodland in NSW, ACT, Vic. and Tas. See general notes
		Now registered as a cultivated form of A. dealbata
		Older leaves grey-green, new leaves yellow-green.
		Well suited to a variety of soil and moisture conditions.

TURN ALONG BITUMEN PATH, NICKNAMED WATTLE TRACK, BECAUSE IT IS NEXT TO THE ACACIA SECTION TALK ABOUT THE VARIETY OF HEIGHTS, COLOURS OF LEAVES AND PHYLLODES. TALK ABOUT TAXONOMIC DECISION WHICH MEANS THAT AUSTRALIAN ACACIAS WERE SPLIT INTO THREE GENERA, AND WE SHALL SEE AN EXAMPLE OF *Vachellia*.

Group	Previous Classification	Current Classification
Typical 'Pea-flowered' Plants	Family Fabaceae	Family Fabaceae, subfamily Faboideae
Acacia and relatives	Family Mimosaceae	Family Fabaceae, subfamily Mimosoideae

<i>Senna, Cassia</i> and relatives	Family Caesalpiniaceae	Family Fabaceae, subfamily Caesalpinioideae
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In the subfamily Mimosoideae, overall, the species formerly classified as Acacia are now spread across five genera:

- Acacia: 1032 species, Australia, Asia. At least 950 in Australia
- Acaciella: 15 species, Americas
- *Mariosousa*: 13 species, Americas
- Senegalia: 199 species, Americas, Africa, Asia, Australia
- Vachellia: 156 species, Americas, Africa, Asia, Australia

Site,	Plant	Comments	
Map no.			
S3, R	A. havilandiorum	Erect or spreading tree or shrub 1–4 m high;	
(46)	Needle Wattle,	Inflorescences simple, 1–3 in axil of phyllodes, bright yellow, July–October.	
	Haviland's Wattle	Distribution is chiefly in the Pilliga Scrub-Gilgandra-Miljee area in South Australia, New	
		South Wales and Victoria.	
		Usually grows in mallee and box woodland communities, in sandy or loamy red earths	
S3, R	Vachellia caven	Remind re-classification of non-Australian Acacias	
(47)	Roman Cassie,	South America. Retained in ANBG to illustrate diversity	
	Caven, Aromita,	Pod very different from Oz wattles	
	Aroma Criollo,	Note stipular spines.	
	Churque	'Thorned acacias' or, correctly, Vachellias with large stipular spines (V. cornigera,	
	Espinillo, Espino	Mexico and Central America) sometimes whistle – ants eat off ends of spines and	
		burrow into interior to make home for young. Later the wind blows in the hollow,	
		making the whistling sound. By contrast, Australian wattles with soft foliage	
		sometimes whisper.	
		Note also, African 'thorn trees' are now Vachellia and have very long stipular spines.	
S15, L	A. pteraneura	Shrub to 3m high or tree 6 to 8m high, sometimes with pseudo-conifer growth forms,	
(48)	Formerly named	trunks and main branches sub-straight to crooked.	
	<i>A. aneura</i> var	Phyllodes slender, at upward angle.	
	conifera	Spikes about 10-30mm long of yellow inflorescences, usually from within the axil of	
	Broad-winged	the phyllodes	
	Mulga,	Native to the Pilbara, Mid-West and Goldfields regions of Western Australia.	
	Conifer mulga		
S2, R	A. silvestris	The erect tree typically grows to a height of 6 to 30 metres.	
Very tall,	Bodalla silver	Leaves bipinnate, balls of yellow flowers in panicles, from July to September	
in from	wattle,	Grows in dry sclerophyll forest, in gravelly clay and sandstone-derived soils, good	
road	Red Wattle	drainage in gullies and on ridges.	
(49)		SE NSW, coastal Vic. Original collected in Bodalla State Forest, W of Narooma.	
S15h, L	A. cognata	Normal, upright form	
(50)	Narrow-leaved	Collected Mueller 1864, Twofold Bay	
	Bower Wattle	Lowland sclerophyll forest, Nowra to Orbost	
		Timber springy - tool handles, shafts	
		Another good example of upright form is in S18 along Main Path	
S3, R	A. cognata???	Three young saplings	
(50)			
S122, R	A. boormanii	Recognise it? See notes for (2)	
(51)	Snowy River	(Way up from road but stands out when in flower.)	
	Wattle		

TURN LEFT AT TRAFFIC ISLAND

Walk down tar road and pause at Black Wattle indentation opposite depot

Site,	Plant	Comments	
Мар			
no.			
S125, R (52)	<i>Callicoma</i> <i>serratifolia</i> Black Wattle, Callicoma, Butterwood, Silver Leaf, Silver-Leaf Butterwood, Wild Quince	Image: Curve of the second s	
S128, L	Acacia coriacea	Found in the Pilbara, north western WA where it is grown ornamentally. It flowers	
(53)	subsp pendens	from March to August with pale yellow to pale lemon yellow axillary balls. The	
	Weeping wirewood	species was used for making shields and spears.	

WALK DOWN TO CAFÉ AND CLOSE THE WALK

QUIZ SHEET & ANSWERS

See attached sheet

SUMMARISE

Acacia: height from ground cover to very tall.

Foliage: characteristics of leaves, phyllodes, winged phyllodes, cladodes (leaflike flattened stem);

Different shapes and colours of foliage indicate where may have come from

Flowers: many, form a globe of flowers, or a cylinder of flowers. Depending on species a globe could have just 3-4 or up to 70 or more individual flowers.

Colours seen: yes, different shades of green, as well as cream to rich golden colour.

Any questions?

Looking forward to you taking some of the Wattle Week walks. If you would like to do this again, happy to help.

PS: Naturally, gardens change. Please let one of us know if there are any changes that need to be made. Mary Bush and Linda Beveridge, August 2020

ACACIA QUIZ Match scientific names to the photos

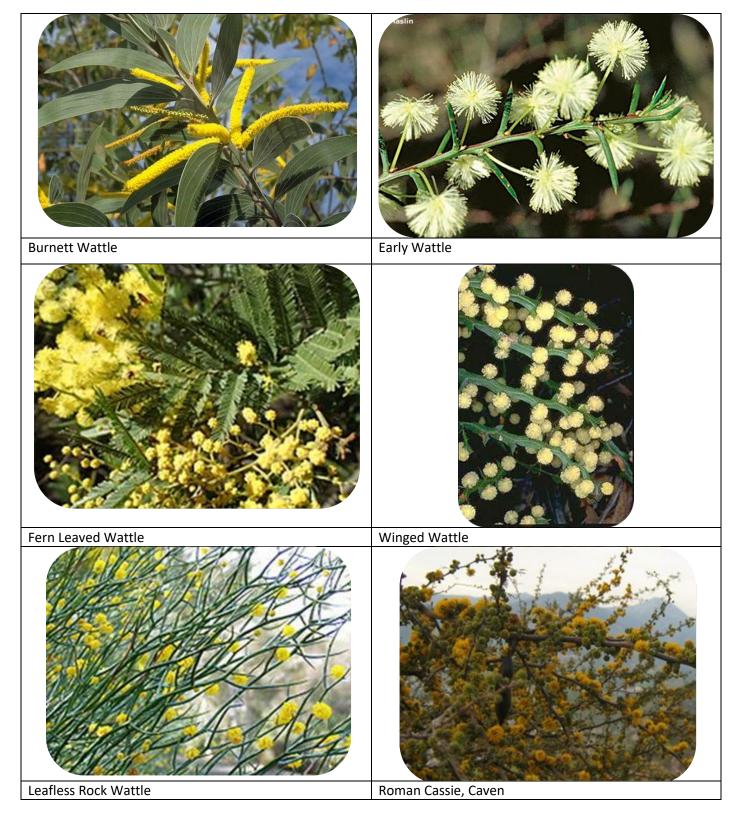
- a. Acacia alata b. Acacia aphylla
- c. Acacia filicifolia

e. Acacia grandifolia

d. Acacia genistifolia

Acacia filicifolia

f. Vachellia caven



ACACIA QUIZ

Match scientific names to the photos - ANSWERS HAVE BEEN INSERTED UNDER EACH PHOTO

- a. Acacia alata
- b. Acacia aphylla
- c. Acacia filicifolia

- d. Acacia genistifolia e. Acacia grandifolia
- f. Vachellia caven

