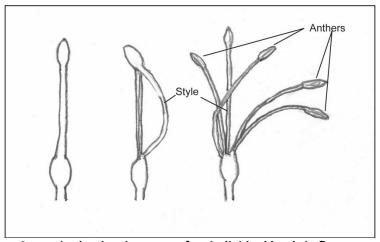
Banksias of Esperance Shire

Banksias are members of the large Proteaceae family, which also includes Grevilleas and Hakeas (Note: Proteas are natives of South Africa). Of the 180 species currently recognised, 161 (89%) are found only in WA. 29 of these occur within the Shire of Esperance.

What are the defining features of Banksias?

Banksias are characterised by the structure and arrangement of their flowers. Unlike most 'typical' flowers, Banksia flowers do not have defined petals. Instead, their flowers begin as a long tube which gradually splits into four segments as the flower matures. Instead of being located at the end of long stamens, one pollen-bearing anther is attached to the end of each flower segment. The tube splits partially to release the style first, and eventually fully separates to expose the stamens.



Stages in the development of an individual banksia flower.

Hundreds of these individual flowers are clustered densely together in either a cylindrical shape or a domed head to form the familiar Banksia flowering structures.



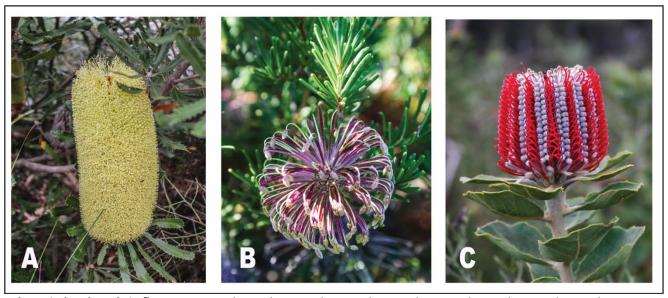
Left: Banksia petiolaris flowers are arranged in a cylindrical shape; Right: Banksia plumosa flowers form a dome shape.

Our most common and best-known local species, the Showy Banksia (*Banksia speciosa*), is the largest in size. It grows to form a spreading tree of up to 5m in height. Most other species are medium-sized shrubs, although several are prostrate. These grow along the ground with just their leaves and flowers sticking up out of the sand.

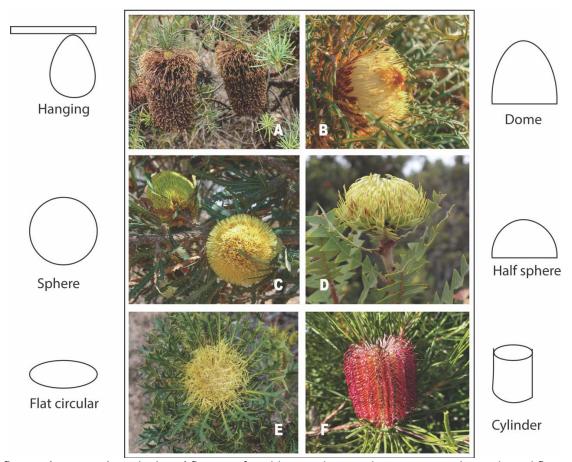


Banksia growth forms. A: Tree – *Banksia speciosa*; B: shrub – *Banksia media*; C: spreading prostrate – *Banksia blechnifolia*; D: small prostrate – *Banksia obtusa*.

Banksia flowers come in different shapes, sizes and colours. While yellow is the most common colour, some species have flowers that are red, orange, brown or violet.



Colours in local Banksia flowers. A: Southern Plains Banksia *Banksia media;* B: Violet Banksia *Banksia violacea;* C: Scarlet Banksia *Banksia coccinea*.



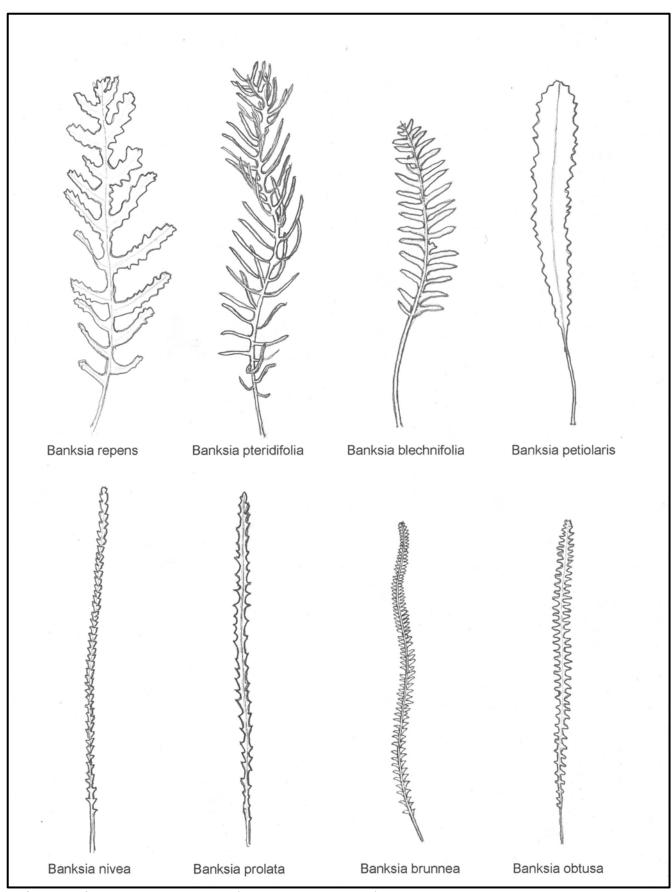
Banksia flower shapes. A: 'Upside down' flowers of Nodding Banksia *Banksia nutans*; B: dome-shaped flower of *Banksia prolata*; C: spherical flower of Tennis Ball Banksia *Banksia laevigata*; D: hemispherical flower of *Banksia baxteri*; E: flat flower of Prickly Dryandra *Banksia armata*; F: cylindrical flower of Red Swamp Banksia *Banksia occidentalis*.

Banksia species also vary greatly in the size of their flowers. The Woolly Banksia *Banksia baueri* (also referred to as the Teddy Bear Banksia) has the largest flowers of any Banksia. They have a woolly appearance and are up to 40cm high and 18cm or more across. By way of contrast, the Teasel Banksia *Banksia pulchella* has very small flowers just 4cm across which resemble miniature versions of its larger relatives.

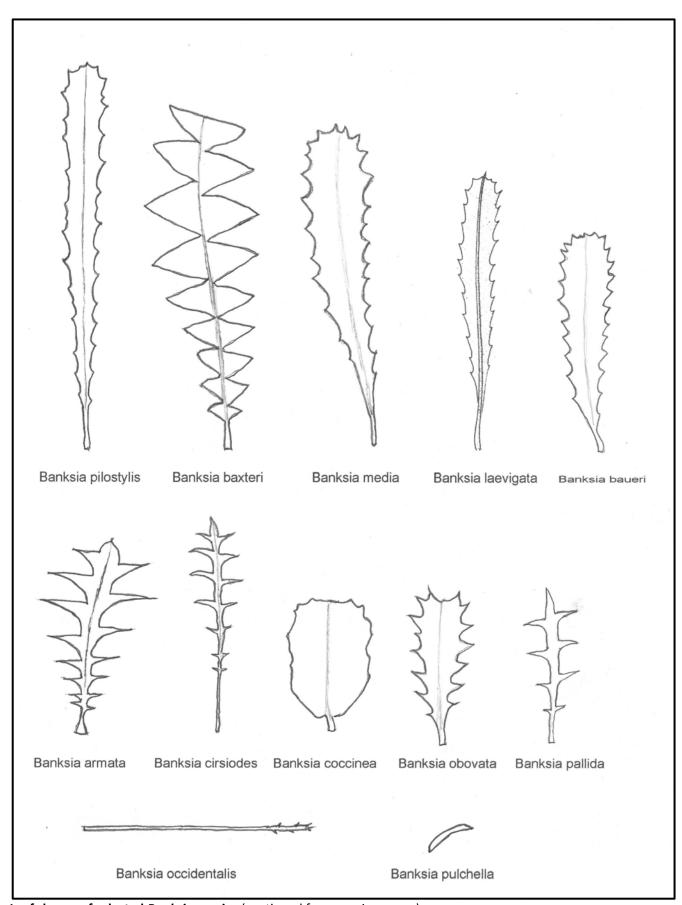


Relative sizes of Banksia flowers. Left: Giant flower of *Banksia baueri*; Centre: medium sized flower of *Banksia speciosa*; Right: the tiny and delicate flower of *Banksia pulchella*. Images are all to the same scale.

There is also enormous variation in the size and shape of leaves of the different species. They range in size from 1 to 40cm in length. Some are smooth and others very prickly. Still others are feathery or shaped like the teeth of a saw.

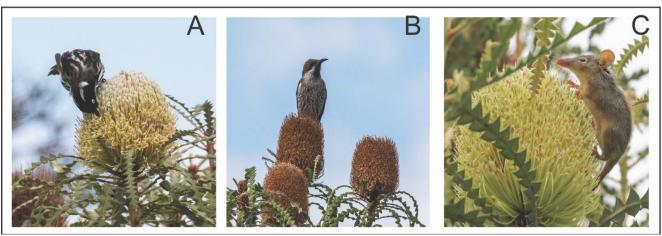


Leaf shapes of selected Banksia species (continued on next page)



Leaf shapes of selected *Banksia* species (continued from previous page)

Banksia flowers produce a lot of nectar which in turn attracts numerous insects. Both nectar and insects are important sources of food for both birds and small mammals. Their dense and often prickly foliage also provides a place of shelter. As a result, Banksias are a keystone element of the ecosystem that sustains numerous small animals.



Animals that feed on nectar and insects from Showy Banksia *Banksia speciosa*. A: New Holland Honeyeater; B: Western Wattlebird; C: Honey Possum.

It is well known that the Nyungar seasons of Djilba and Kambarang (August-November) are when most of our native plants flower. However Banksias are an exception to this rule, as there is always at least one species flowering throughout the year, ensuring an ongoing food supply is available to the nectar and insect feeders that rely on them.

-	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
B. speciosa												
B. pulchella												
B. pilostylis												
B. occidentalis												
B. nutans												
B. media												
B. nivea												
B. obovata												
B. tenuis												

Flowering times for some common Banksia species occurring in the Shire of Esperance

Banksias occurring with the Shire of Esperance

Species	Common name	Growth form	Where found				
Banksia alliaceae		Shrub	Rare, Cape Arid				
Banksia armata	Prickly Dryandra	Shrub	Common				
Banksia baueri	Woolly Banksia	Shrub	West of Esperance				
Banksia baxteri	Birds Nest Banksia	Tall shrub	Stokes Inlet				
Banksia blechnifolia	Ground Banksia	Prostrate	North of Esperance				
Banksia brunnea		Prostrate	Rare, Cape Le Grand				
Banksia cirsiodes		Shrub	Rare, Cape Le Grand, Condingup				
Banksia coccinea	Scarlet Banksia	Uncommon	Stokes Inlet				
Banksia elderiana	Swordfish Banksia	Large shrub	North and west of Esperance				
Banksia falcata	Prickly Dryandra	Shrub	Rare, Mt Arid				
Banksia laevigata	Tennis Ball Banksia	Shrub	Far north-west of Esperance				
Banksia media	Southern Plains Banksia	Shrub	Common around Esperance				
Banksia meisneri	Meisner's Banksia	Shrub	Rare, Cape Le Grand				
Banksia nivea	Honeypot Dryandra	Small shrub	Common in south of Shire				
Banksia nutans	Nodding Banksia	Shrub	Common around Esperance				
Banksia obovata	Wedge-leaved Dryandra	Shrub	Common around Esperance				
Banksia obtusa	Shining Honeypot	Small prostrate	Common around Esperance				
Banksia occidentalis	Red Swamp Banksia	Tall shrub	Common around swamps				
Banksia pallida		Shrub	Far north-west of Esperance				
Banksia petiolaris		Prostrate	North and east of Esperance				
Banksia pilostylis		Large shrub	North of Esperance				
Banksia plumosa		Shrub	Rare, Cape Le Grand				
Banksia prolata		Shrub	Cape Le Grand, Cape Arid, Dempster Head				
Banksia pteridifolia	Tangled Honeypot	Small shrub	Rare, Cape Le Grand				
Banksia pulchella	Teasel Banksia	Small shrub	Common in south of Shire				
Banksia repens	Creeping Banksia	Prostrate	Common in south of Shire				
Banksia speciosa	Showy Banksia	Tree	Common in south of Shire				
Banksia tenuis		Semi-prostrate	North and east of Esperance				
Banksia violacea	Violet Banksia	Shrum	West of Esperance				

Prepared by Ken Mills Esperance Wildflower Society May 2023