



## Bush foods and fibres

- Plant-based bush foods, medicines and poisons can come from nectar, flowers, fruit, leaves, bark, stems, sap and roots.
- Plants provide fibres and materials for making many items including clothes, cords, musical instruments, shelters, tools, toys and weapons.
- A fruit is the seed-bearing structure of a plant.
- Do **not** eat fruits that you do not know to be safe to eat. Allergic reactions or other adverse reactions could occur.
- We acknowledge the Traditional Custodians of this land and pay our respects to the Elders both past, present and future for they hold the memories, traditions, culture and hope of their people.

### Plants as food: many native plants must be processed before they are safe to eat.

Flowers, nectar, pollen, honey, lerps (psyllid tents) manna (e.g. Ribbon Gum <i>Eucalyptus viminalis</i> exudate), gum (e.g. <i>Acacia decurrens</i> )	 	Sugars, vitamins, minerals, starches, proteins & other nutrients
Fruit & seeds	Staple foods	Carbohydrates (sugars, starches, fibre), proteins, fats, vitamins
Leaves, stalks, roots, apical buds	Staple foods	Carbohydrates, protein, minerals
Tubers, rhizomes	Plants such as daisies, lilies, orchids and vines were a source of starchy tubers known as yams. The yam daisy <i>Microseris lanceolata</i> (Asteraceae) was widespread in inland NSW and other states. The native yam <i>Dioscorea transversa</i> grows north from Stanwell Tops into Qld and Northern Territory and can be eaten raw or roasted as can those of <i>Trachymene incisa</i> .	Carbohydrate, fibre, protein, vitamins, minerals

Plant	Description of food		Other notes
<p><i>Acacia</i></p> <p><i>decurrens</i></p> <p><i>longifolia</i></p> <p><i>melanoxylon</i></p> <p><i>sophorae</i></p>	<p>Wattle seed is a rich source of iron, and other essential elements.</p> <p>Source of pollen for bees. Edible gum is exuded at damage sites and may form a gel when mixed with water or be eaten fresh.</p> <p>The iconic trees gidgee, brigalow and mulga are all species of acacia. Acacias have copious pollen but produce nectar in extra-floral nectaries, not in the actual flowers.</p>		<p>Saponins and tannins from crushed leaves and bark were used to bring fish to the surface; bark was used as a source of fibre and tannin and both as sources of dye. Timber used for making weapons, tools and in cabinet making.</p>
<p><i>Acrotriche divaricata</i></p> <p>&amp; other Ericaceae</p>	<p>Fruit of many Ericaceae plants e.g. <i>Acrotriche divaricata</i>, are edible.</p>		
<p><i>Alpinia caerulea</i></p>	<p>Native Ginger is a perennial herb growing to 3m. It has edible roots, new shoots and small blue fruit containing an edible white pulp. It grows in rainforests north from Gosford and into Qld.</p>		
<p><i>Araucaria bidwillii</i></p>	<p>Bunya-bunya, from Qld, is not found naturally in NSW and is planted in KWG and many public and private grounds. Stands of this species undergo mast flowering which instigates large gatherings to harvest the plentiful, nutritious and long-lasting seeds and to socialise.</p>		<p>Question: Were the seeds of the Wollemi Pine (<i>Wollemia nobilis</i>) ever used as a food source when the trees were more widely distributed?</p>
<p><i>Austromyrtus</i> species</p>	<p>Fruit of some Myrtaceae plants e.g. Midgen berries (<i>Austromyrtus dulcis</i> &amp; <i>A. tenuifolia</i>) are sweet and edible.</p>		
<p><i>Backhousia citriodora</i></p>	<p>Lemon Myrtle is rich in calcium and the essential oil, citral. Crushed leaves used as an infusion.</p>		<p>Used as healing agent.</p>
<p><i>Banksia</i> species</p>	<p>Source of nectar direct from flower spike or infused into water to make high-energy drinks. Source of pollen and nectar for bees to turn into honey and supports a wide range of birds and insects including wasps, beetles, moths and butterflies.</p>		<p>Dried flower spike infused with fat functions as a candle/ fire stick.</p>

<p><i>Callistemon</i> species</p>	<p>Bottlebrush flowers yield copious nectar when soaked in water or sucked but beware of bull ants also seeking nectar.</p>		
<p><i>Carex appressa</i></p>	<p>Tall Sedge is a food plant for butterfly larva and provides nectar for butterflies including the spotted sedge skipper, the southern sedge darter, the evening brown.</p>		<p>Used in woven items.</p>
<p><i>Castanospermum australe</i></p>	<p>Black Bean seeds are edible only after the toxins have been flushed away and the seed dried and roasted. They grow along rivers on the far north coast NSW and in Qld.</p>		
<p><i>Citrus australasica</i></p>	<p>Finger Limes grow in rainforests north from Ballina and cultivars are popular components of kitchen gardens. Photo M.A.</p>		
<p><i>Cissus antarctica</i> <i>hypoglauca</i></p>	<p>Native grapes are edible.</p>		<p>Stems assist climbing of trees.</p>
<p><i>Correa alba</i> Star-like white flower</p>	<p>White Correa is seen in every state in Australia except for the Northern Territory. When dried, its leaves make a delicious tea. Planted Knoll KWG</p>		<p>White Correa is climate tolerant, being immune to frost and drought as well as being salt tolerant. Flowers in autumn and winter attract nectar-eating birds and insects.</p>
<p><i>Davidsonia jerseyana</i></p>	<p>Davidson's Plum is an endangered species growing naturally in the far north coast NSW. The fruit has a sharp acidic taste and is processed into jam for contemporary consumption. Goes well as a paste with cheeses.</p>		

<p><i>Dendrobium speciosum</i></p>	<p>Rock Lily stems are rich in starch and can be eaten raw or roasted. This is another slow growing plant and emphasises the need for traditional rules to limit over-exploitation of individual food sources at one location.</p>		
<p><i>Dianella caerulea</i></p>	<p>Flax Lily flowers in spring and summer. Berry changes colour from green to blue/purple and become soft as they ripen. Flour produced from the roots can be made into bread and augmented with dried Dianella seeds.</p>		<p>Berries used to make dye. Leaves used after plaiting as ties or woven into utensils. A high-pitched whistle is produced by blowing across a single leaf.</p>
<p><i>Diploglottis campbellii</i></p>	<p>Small-leaved Tamarind of NSW &amp; Qld rainforest origins has tangy orange or red coloured fruit encased in an outer covering. Planted near Black Bean tree east of ponds.</p>		
<p><i>Doryanthes excelsa</i></p>	<p>Gynea flowers are laden with nectar and the spike was eaten like a giant asparagus shoot. The roots were harvested and made into roasted cakes.</p>		<p>The leaves are very long and yield tough fibres.</p>
<p><i>Eupomatia laurina</i></p>	<p>Bolwarra is a soft, sweet fleshed berry with strong, spicy seeds. When dried it can be used as a spice.</p>		
<p><i>Exocarpos cupressiformis</i></p>	<p>Cherry Ballart has an edible stem supporting the hard, non-succulent seed. It is in the Santalaceae family and a root parasite of other plants.</p>		

<p><i>Ficinia nodosa</i></p>	<p>Knobby Club-rush seeds are edible and the grass itself can be used to add flavour to fish and meats through smoking techniques, giving a flavour similar to green tea. Planted at the Knoll KWG</p>		<p>Widely used by Aboriginal people across south-eastern Australia in the manufacture of cultural items such as baskets. It provides habitat for birds, lizards and snakes.</p>
<p><i>Ficus macrophylla &amp; coronata</i></p>	<p>The minute flowers of a fig are pollinated by a wasp characteristic of each fig species. Small fruit form inside the swollen inflorescence stem (syconium) and ripen to a dark red or black. Some fig species produce fruit on the trunk and major branches. This process is known as cauliflory.</p>		<p>The milky sap of figs was used as a natural latex to cover wounds. Sandpaper fig leaves can be used in the final stages of smoothing timber.</p>
<p><i>Gahnia</i> sp.</p>	<p>Sword Grass has white edible leaf bases. No record of the nuts being safe to eat was found.</p>		<p>Tough leaves of a length good for mat weaving, dilly bags etc.</p>
<p><i>Grevillea speciosa</i></p>	<p>Flowerheads drip with nectar as the flowers open. This is true for many <i>Grevillea</i> and <i>Hakea</i> plants but be wary because caustic burns are caused by some species from WA.</p>		
<p><i>Hicksbeachia pinnatifolia</i></p>	<p>Bopple Nuts are the red edible nuts produced by this vulnerable small Proteaceae tree found north from Nambucca Valley into SE Qld.</p>		
<p><i>Leptospermum species</i></p>	<p>Tea-trees are a source of pollen and nectar and the dried leaves yield a pleasant tea. Vitamin A can be synthesised from tea-trees.</p>		<p>Source of the essential oils citral and citronellal.</p>

<p><i>Leucopogon lanceolatus</i></p> <p><i>Monotoca scoparia</i></p>	<p>Lance beard heath fruit are sweet and edible, probably the case for any local pleasant-tasting heath plant fruit like prickly broom heath (photo).</p> <p><i>Trochocarpa laurina</i> has bitter fruits so should <b>not</b> be eaten.</p>		<p><i>Trochocarpa laurina</i> has hard timber used for waddies.</p>
<p><i>Livistona australis</i></p>	<p>Cabbage Tree Palm growing tip, known as a 'cabbage', was eaten either uncooked or roasted. Unfortunately, this killed the tree. Cabbage palms were once common in the Sydney area, but their numbers have been greatly reduced.</p>		
<p><i>Lomandra longifolia</i></p> <p>Spiny-headed Mat-rush</p>	<p>Spiny-headed Mat-rush is a large tussocky plant with strappy leaves that is common throughout south-eastern Australia and is found across most of KWG. Its seeds, high in protein, can be collected from the non-woody capsule and pounded into a bread mix while the core of the plant and the base of the leaves are eaten as a vegetable. <i>Lomandra</i> is a food plant for the caterpillars of several butterflies. Indigenous to KWG.</p>		<p>The plant was useful for weaving cultural items such as necklaces, headbands, girdles, baskets, mats and bags for carrying foods, as well as for making technologies such as eel traps and hunting nets. Aboriginal peoples use the roots to treat bites and stings.</p>
<p>Loranthaceae family</p>	<p>Mistletoe fruit are edible when ripe but have a sticky texture which enable the seed to attach to host branches once it passes through the bird's simple digestive system.</p>		
<p><i>Macadamia tetraphylla</i></p>	<p>Macadamia nuts are tree nuts which are a rich source of fats, carbohydrates and protein as well as vitamins and minerals. Macadamias are not local but have been planted widely south of its home range in northern NSW and southern Qld and various cultivars are commercially successful and grown internationally.</p>		

<p><i>Macrozamia communis</i></p>	<p>Burrawangs are dioecious and bear slender cylindrical male cones on a separate plant from the robust ovoid female cones. Burrawang seed flesh and seed kernels from the female cones were a staple food after <b>extensive, careful preparation to remove toxins</b>.</p>		<p>The trunk is rich in starch and was briefly commercially exploited as a source of starch and paste.</p>
<p><i>Marsilea drummondii</i></p>	<p>Nardoo (fern) spores can be consumed after roasting, grinding and preparing as a bread, otherwise consumption is not safe.</p>		
<p><i>Melaleuca quinquenervia</i> <i>linariifolia</i> <i>styphelioides</i></p>	<p>Some paperbark trees have bark in fine sheets used for wrapping food prior to cooking. The leaves are rich in essential oils and the flowers are rich in nectar and yield a nutritious infusion.</p>		<p>The bark was used as raincoats, sleeping mats, for lean-to shelters, for dressing wounds and for wrapping delicate objects — like newborn babies.</p>
<p>Orchidaceae</p>	<p>Terrestrial orchid and lilies were a source of starchy tubers known as yams. The yam daisy <i>Microseris lanceolata</i> was widespread in inland NSW and other states.</p>		
<p><i>Pteridium esculentum</i></p>	<p>Bracken Fern rhizomes yield a sticky, nutritious starch when crushed and are available just below ground level in all seasons.</p>		<p>Juicy young stems used to reduce intensity of insect bites.</p>
<p><i>Rubus rosifolius</i></p>	<p>Native raspberry can be eaten fresh.</p>		
<p><i>Smilax glycyphylla</i></p>	<p>Native sarsaparilla leaves make a pleasant flavoured infusion.</p>		

<i>Syzygium paniculatum</i>	Magenta Lilly Pilly has sweet, fleshy fruit suitable for eating when ripe or as ingredients of jams and cordials.		
<i>Telopea speciosissima</i>	Waratah flowerheads drip with nectar as the flowers open.		Young branches are pliable and suitable for basket making. Protected species.
<i>Tetragonia tetragonoides</i>	Wild greens provided fresh salad leaves rich in Vitamin C (helps to prevent scurvy).		
<i>Themeda australis</i> and other grasses	Grains are single seeded fruits produced by grasses. In most cases each flower head will develop to contain many individual grains. Grains become dry, change in colour from green to brown and release easily from the plant when mature.		<i>Themeda australis</i> (Kangaroo Grass) 
<i>Trachymene incisa</i>	Wild parsnip has branched taproots, prepared by baking or eaten raw.		
<i>Xanthorrhoea</i> species	Grass-tree flowers are rich in nectar, a high-energy food. The central new leaf bases are tender and juicy and can be eaten raw or baked. Starch can be extracted from the upper trunk but the process kills the plants.		The stem of the flower spike was used for spear shafts and for making fire, and the plant's resin was used as a strong glue.

#### REFERENCES:

- Robinson, Les. *A Field Guide to the Native Plants of Sydney*. Kangaroo Press, 1991.
- Fairley, Alan & Moore, Philip. *Native Plants of the Sydney District*. Allen & Unwin, 2010.
- Flora of New South Wales*, Vol 2. UNSW Press, 2007.
- Low, Tim: *Wild food plants of Australia* Angus & Robertson, 1991.
- Cribb, A.B & J.W. *Useful wild plants in Australia*, Fontana Books, 1982.
- Lassak, E.V. & McCarthy, T. *Australian medicinal plants*. Reed New Holland, 2001.
- For general access to PlantNET see also <http://plantnet.rbgsyd.nsw.gov.au/>  
[https://web.archive.org/web/20060502170341/http://www.rbgsyd.nsw.gov.au/information\\_about\\_plants/botanical\\_info/aboriginal\\_bush\\_foods](https://web.archive.org/web/20060502170341/http://www.rbgsyd.nsw.gov.au/information_about_plants/botanical_info/aboriginal_bush_foods)  
[https://web.archive.org/web/20060624233927/http://www.rbgsyd.nsw.gov.au/royal\\_botanic\\_gardens/visitor\\_information/walks\\_and\\_tours/aboriginal\\_walk](https://web.archive.org/web/20060624233927/http://www.rbgsyd.nsw.gov.au/royal_botanic_gardens/visitor_information/walks_and_tours/aboriginal_walk)  
<https://www.sydneywildflowernursery.com.au/edible-native-plants/>

#### Acknowledgements

Produced by members of the Australian Plants Society North Shore Group for Walks & Talks programme 2021/WAG and freely available for self-education. Not to be sold. Photos WAG.

# Bush foods and fibres Walk - Ku-ring-gai Wildflower Garden

## Australian Plants Society North Shore Group

- Plant-based bush foods, medicines and poisons can come from nectar, flowers, fruit, leaves, bark, stems, sap and roots.
- Plants provide fibres and materials for making many items including clothes, cords, musical instruments, shelters, tools, toys and weapons.
- A fruit is the seed-bearing structure of a plant.
- Many native plants must be processed before they are safe to eat.
- Do **not** eat fruits or plants that you do not know to be safe to eat. Allergic reactions or other adverse reactions could occur.
- We acknowledge the Traditional Custodians of this land and pay our respects to the Elders both past, present and future for they hold the memories, traditions, culture and hope of their people.

**Caley's Pavilion:** *Acrotriche divaricata*, *Alpinia caerulea*, *Araucaria bidwillii*, *Backhousia citriodora*, *Castanospermum australe*, *Cissus antarctica*, *Cissus hypoglauca*, *Citrus australasica*, *Davidsonia jerseyana*, *Dianella caerulea*, *Doryanthes excelsa*, *Eupomatia laurina*, *Ficus coronata*, *Ficus macrophylla*, *Grevillea speciosa*, *Gynochthodes (Morinda) jasminoides* (edible but unpalatable), *Hicksbeachia pinnatifolia*, *Livistona australis*, *Macadamia tetraphylla*, *Marsilea drummondii*, *Pittosporum multiflorum*, *Rubus rosifolius*, *Syzygium australe*, *Syzygium luehmannii*, *Syzygium oleosum*, *Syzygium paniculatum*, *Syzygium smithii*, *Xanthorrhoea species*.

**Solander Trail:** *Banksia ericifolia*, *Castanospermum australe*, *Callistemon* and *Melaleuca species*, *Diploglottis campbellii*, *Exocarpos cupressiformis*, *Gahnia sp.*, *Leptospermum species*, Loranthaceae family members (mistletoes), *Pteridium esculentum*, *Themeda australis*.

**Lambert's Clearing:** *Acacia*, *Macrozamia communis*, *Smilax glycyphylla*, *Syzygium paniculatum*, *Trochocarpa laurina*.

**The Knoll Garden:** *Austromyrtus dulcis* & *A. tenuifolia*, *Backhousia citriodora*, *Banksia sp.*, *Callistemon* and *Melaleuca species*, *Carex appressa*, *Correa alba*, *Dendrobium speciosum*, *Dianella caerulea*, *Lomandra longifolia*, *Telopea speciosissima*, *Trachymene incisa*, *Xanthorrhoea species*.

**Many of the listed species have been planted in KWG and do not occur naturally in this area.**

Produced by members of the Australian Plants Society North Shore Group for Walks & Talks programme 2021/WAG and freely available for self-education. Not to be sold.