



Song of melaleuca

The melaleuca was here long before humans walked on this ancient continent, before Indigenous people stood on its soil, trekked across its plains, hunted in its woodlands, and explored its central deserts.

Being nomadic and expert at living in their environment, Australian Aboriginals quickly discovered the versatility and flexibility of the many different types of melaleuca. They would use its branches to build miamias to shelter from the sun, rain and wind, and its papery outer layers for wrapping food and cooking, plugging holes in canoes, and as clothing for

warmth and to keep out the rain. The flaky layers of melaleuca bark were perfect for soft inner linings for their coolamon cradles, carrying baskets, bandages and sleeping mats.

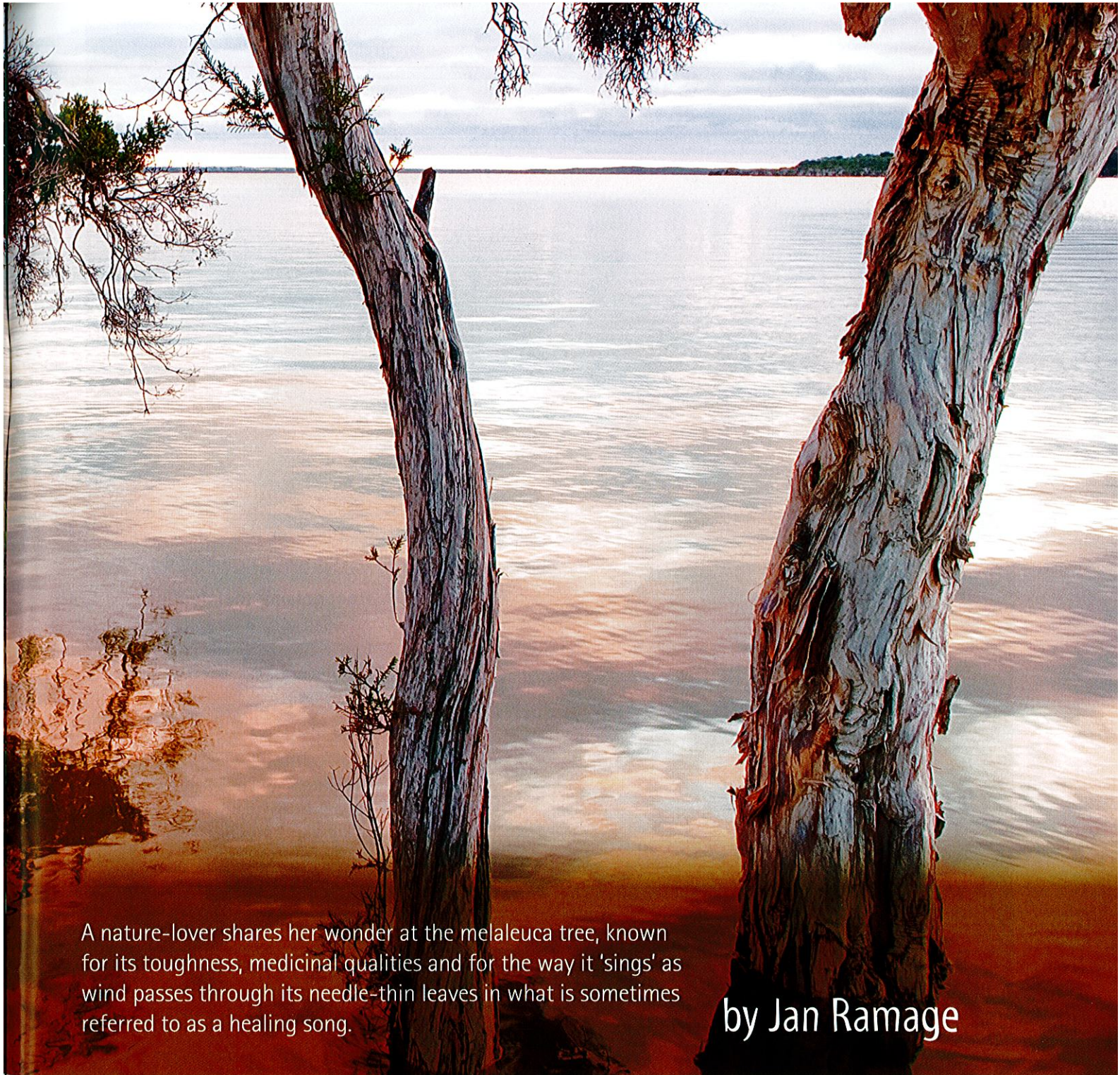
Aboriginal people also discovered the healing qualities of melaleuca. The leaves were used for medicinal purposes. Chewing the young shoots or young leaves could dull headaches and sooth ailments. The sweet berries and seeds were used as a condiment, and the oils for healing skin complaints. Fishing pots, similar to the craypots used today, were originally designed using melaleuca's thin, flexible branches.

Materials from different parts of the tree were easily accessible, disposable and completely biodegradable.

Names

Melaleuca is a Greek word—*melas* means black and *leukos* means white. In the Nyoongar language melaleuca has various names depending on the variety of plant and include mindiyet, booree and kwytyat.

The melaleuca is from the myrtle family. The name myrtle refers to the white, scented flowers and the black berries which, in ancient Greek mythology, were sacred to the goddess



A nature-lover shares her wonder at the melaleuca tree, known for its toughness, medicinal qualities and for the way it 'sings' as wind passes through its needle-thin leaves in what is sometimes referred to as a healing song.

by Jan Ramage

Venus. The tree is sometimes called the paperbark, punk tree, honey myrtle or periwinkle plant.

Melaleuca is endemic to Australia, with more than 200 species of which about 150 can be found throughout Western Australia.

A tree of many uses

Today the melaleuca can be harvested to produce tea tree oil. The name 'tea tree' is taken from the brown colour the tree stains the water. As the melaleuca is often found along water courses, shedding leaves fall into the water below staining the waterways as they die and discolor.

Melaleuca alternifolia is notable for these essential oils. The oils are both anti-fungal and antibiotic, and can be safely used as topical preparations. Indigenous people used the oils for healing and today they are commercially produced for health industries. The terpenes in tea tree oil kill many types of bacteria. Tea tree oil is also used for the treatment of skin ailments such as acne, boils and yeast infections.

The oil is anti-inflammatory and therefore useful for arthritis, bunions and muscle pain. Like the closely related eucalyptus, tea tree oil can also help treat respiratory infections

Above Saltwater paperbarks (*Melaleuca cuticularis*) in Stokes National Park.
Photo – Sallyanne Cousans

when added to the bath or used in a vaporiser. It should never be ingested, however, as it can be highly toxic.

On a less scientific basis, the beautifully mottled grain of larger varieties of melaleuca makes them ideal for wood turning. Melaleuca plants are



Left Rottnest tea-tree (*Melaleuca lanceolata*).

Photo - Len Stewart/Lochman
Transparencies

Centre left *Melaleuca filifolia*.

Photo - Sallyanne Cousins

Bottom left Straw-necked ibis (*Threskiornis spinicollis*) perch on nests built in melaleuca shrubs.

Photo - Simon Cherriman

also perfect for bee keepers. Bees are attracted to the abundance of flowers and the strong scent from the pollen.

Recognising melaleuca

Melaleucas flower from March to July, with some species flowering up to five times a year. Because melaleucas flower at a different time to many other species, they provide food and nectar for native creatures when 'stores' may otherwise be scarce. The shape of the flowers often resembles those of a bottlebrush: fluffy and thick, with spikes. They come in a range of colours, from white to shades of red, orange, purple and yellow.

Seed capsules are often crowded together on the twig of a branch. They are broadly cylindrical, thick-walled and woody, and contain many tiny seeds.

Wildlife haven

Melaleuca trees provide a refuge for some of our native wildlife. Their thick bushy growth gives shelter to small birds and native marsupials. On close inspection, intricately built nests can be found nestled between the thin branches. Birds feed on nuts, seeds and the flowers' sweet nectar. Insects attracted by the melaleuca provide food for many small birds such as miners, weebills, fantails and honeyeaters. Melaleuca wood and flowers both have a strong scent, which attracts a variety of insects that are extremely beneficial for our environment. Many of these insects also pollinate other native plants, as well as some commercial farm crops.

The threatened south-west brush-tailed phascogale (*Phascogale tapoatafa*)





Above Freshwater paperbark (*Melaleuca raphiophylla*).
Photo – Marie Lochman

Right Grey-bellied dunnart (*Sminthopsis griseoventer*).



Below right Freshwater paperbark (*Melaleuca raphiophylla*) has characteristic peeling bark.
Photos – Simon Cherriman

drinks the nectar from melaleuca flowers, and the tiny western pygmy possum (*Cercartetus concinnus*) feeds on their fruit, nectar and pollen. Echidnas (*Tachyglossus aculeatus*) can also be found in melaleuca habitat.

Due to its growth habit, melaleuca stands are often referred to as heaths. In Wheatbelt areas such as around Narembeen, melaleuca heaths provide food and shelter for malleefowl (*Leipoa ocellata*). This bird is threatened due to disappearing habitat and the introduction of predators.

Farming our environment

Fragile soils can be held together by the fast-spreading root systems of melaleuca trees, often preventing or alleviating wind-borne soil erosion. The strong and resilient natural qualities of some species enables them to grow close to salt pans. When established in or near 'saline seeps', such species can also help lower the water table and slow the spread of salt pans.

Brushwood species of melaleuca are hardy enough to establish themselves

in small cracks in rocky hilltop areas, deep sloping sands and saline margins, as well as clay type soils. Soils can be quite low in many nutrients but still sustain melaleucas.

Melaleuca seedlings even survive in gravel-covered areas and paddocks prone to strong winds. Sometimes when winds pass through the small needle-shaped leaves, the trees appear to be 'singing'; the beautiful melody is sometimes referred to as a healing song.

A versatile species

Many species of melaleuca trees and shrubs are suitable for planting in modern garden beds. As well as needing less water, they are fast growing and hardy, and attract native birds and insects that thrive on the abundant nectar, seeds, and nutritious soft new shoots. Native birds are always a welcome and beautiful addition to suburbs. Melaleucas are well adapted

to extreme weather conditions and can survive through our hot dry summers with little rain. They come in a wide variety of forms, colours and sizes and suit any garden or purpose.



Jan Ramage is a teacher and author of children's books. She writes about Australian animals and our natural environment. Jan's latest book, *Deepsea Whale Rescue*, won the 2013 zoological Whitely Award. Her other book published by the Department of Parks and Wildlife, *Tuart Dwellers*, won the 2009 Environment Award from The Wilderness Society and was also shortlisted for an Eve Pownall Award. She can be contacted by email (ramcom@westnet.com.au).

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Publishing credits

Editors Samille Mitchell, Joanna Adele, Mitzi Vance, Karla Graham.

Scientific/technical advice Kevin Thiele, Lachie McCaw, Keith Morris.

Design and production Gooitzen van der Meer, Lynne Whittle, Tiffany Taylor, Natalie Curtis.

Illustration Gooitzen van der Meer.

Cartography Promaco Geodraft.

Marketing Cathy Birch.

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Subscription enquiries

Phone (08) 9219 8000.

Prepress and printing Advance Press, Western Australia.

© State of Western Australia
December 2013

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Maps should be used as a guide only and not for navigational purposes.

ISSN 0815-4465

Please do not send unsolicited material, but feel free to contact the editors.

Published by the Department of Parks and Wildlife (DPaW), 17 Dick Perry Avenue, Kensington, Western Australia.

Visit DPaW online at www.dpaw.wa.gov.au.



Department of
Parks and Wildlife

