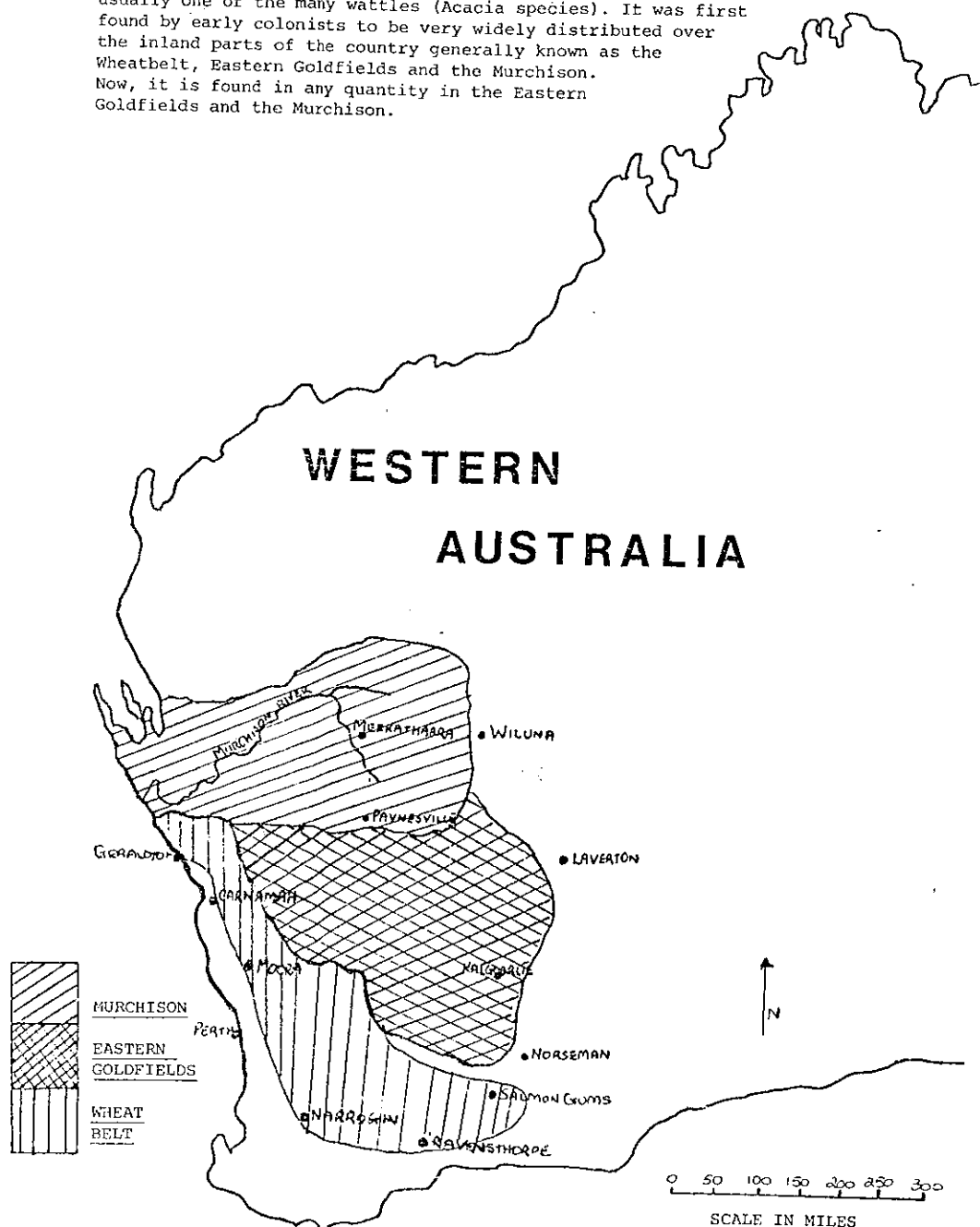


SANDALWOOD

THE MILLION DOLLAR TREE

Sandalwood, as found in Western Australia, is a shrub with the botanical name, '*Santalum spicatum*'. From this is obtained an aromatic wood which has been valued by the Chinese for hundreds of years for use in religious ceremonies.

The shrub is parasitic and requires a host plant on which to live - usually one of the many wattles (*Acacia* species). It was first found by early colonists to be very widely distributed over the inland parts of the country generally known as the Wheatbelt, Eastern Goldfields and the Murchison. Now, it is found in any quantity in the Eastern Goldfields and the Murchison.



SANDALWOOD

ITS USES

Sandalwood is used mainly in a powdered form for the manufacture of joss-sticks, or incense, which are scented burnt offerings used in temples in the Far East.

It also has uses as a cosmetic in Burma and, when mixed into a paste, it is used as a caste mark by the Hindu-worshipping Brahmins.

An aromatic oil can be distilled from the sandalwood and this is used mainly as a fixative in the manufacture of perfumes.

Until the advent of penicillin, it was valued medicinally, and, still today, in a temple in Penang, it is used to drug deadly pit vipers which are a big tourist attraction.

A MAJOR INDUSTRY IN W.A.

Today, sandalwood is a major export industry in Western Australia. Every year, over a million dollars worth of the wood arrives at the Australian Sandalwood Company in Fremantle. From there, it is exported to countries in the Far East.

For this reason, Sandalwood is known as "The Million Dollar Tree".

HISTORY OF SANDALWOOD

Sandalwood, which was originally obtained from the Spice Islands (Indonesia) in the second century A.D., was first exported from Australia nearly 130 years ago.

Because it is still exported from Fremantle today, it is a very strong link with our history.

The first recorded export of the wood, in this State, was in 1845. Farmers who settled on land on which sandalwood grew, were able to pull the wood and sell it for export. This enabled them to buy stores while their farms developed.

In the early twentieth century, sandalwood production played an important part in the gold-mining industry. Many prospectors were also sandalwood pullers and, if they had no money to continue prospecting, they utilised their knowledge of the bush and the location of sandalwood to obtain permits to pull, clean and haul loads of the wood. The proceeds of this would be sufficient to buy stores and provisions for another period of prospecting for gold.

The first record shows that a sample of four tonnes was shipped from Fremantle to Colombo on the 'Vixen', a schooner of 44 tonnes, in 1845.

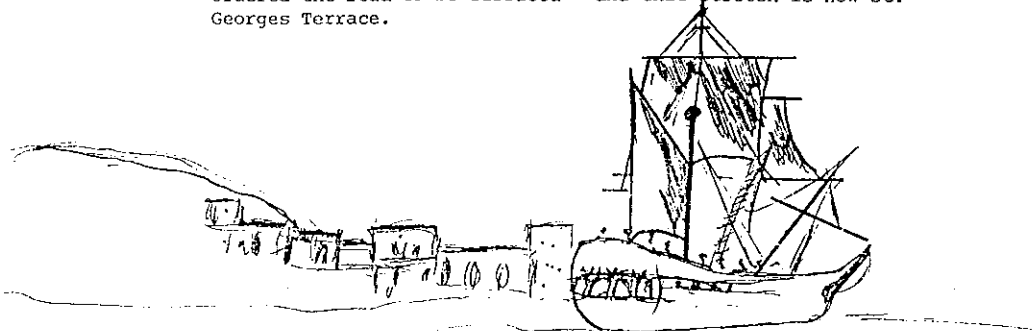
And, the value of the product quickly spread. By the end of 1846, 32 tonnes, worth \$640, had left the Fremantle Port. In the year 1847, there was a dramatic increase and the export figures showed 436 tonnes of sandalwood to the value of \$8,880.

Unfortunately, this rise did not continue, and there was a slump from 1849 until it again reached a peak in 1861, when the recorded export figure was 2670 tonnes valued at \$49,890.

It is interesting to note that in 1868, the other timber exports were valued at \$1,276 while sandalwood was \$52,090. Most of the wood in those times was exported through the ports of Fremantle, Bunbury and Albany.

The sandalwood export trade continued at a reasonable level throughout the remainder of the nineteenth century and into the present century, with the production averaging about 3000 to 4000 tonnes per annum. By 1920, a recorded value of \$7,535,956 of sandalwood had been exported from Western Australia - a lot of money for those times.

The Stirling Highway from Fremantle to Perth had a constant stream of sandalwood laden wagons travelling backwards and forwards to the Port. One Governor in Western Australia who was concerned that the wagons frequently got stuck in the mud outside Government House, ordered the road to be surfaced - and that stretch is now St. Georges Terrace.



THE SANDALWOOD ACT

In the early 1920s, there was over-production of sandalwood, and huge stocks accumulated at Fremantle and in China. It soon became apparent that the trade had to be regularised.

In 1929, the Sandalwood Act was passed, and, in 1930, four exporting firms were amalgamated to become the Australian Sandalwood Company Ltd.

In 1832, the Sandalwood Export Committee was formed. This was to regulate the production and export of sandalwood.

Still today, the Company and Committee are in existence to continue this policy.

HOW JOSS-STICKS ARE MADE

The sandalwood from Fremantle is imported to Penang in the Orient by Muslim, Hajee Essa. He imports all the ingredients for the joss-sticks from Australia, India, Ceylon, China, Burma and Thailand.

Gangs of industrious young men work feverishly every day to meet the increasing demand for joss-sticks. They work in tiny sheds on the banks of the Andaman Sea. The air is choked with the heavy sandalwood dust which clogs ears, eyes and noses.

Handling bundles containing twenty thousand slivers of bamboo, which have been laboriously hand-cut by peasants on the Chinese mainland, the men produce something like thirty tonnes of joss-sticks every seven days.

After the sticks are coated many times in the powder, they are laid out in the sun to dry. Then they are hand-wrapped in bundles together with sheets of prayers.

Buyers come from home for a few sticks, or from a temple for thousands.

THE TEMPLES

THE TEMPLE OF THE SNAKE

This Temple is situated in Penang. It is not just a place of worship, but a great tourist attraction.

Many years ago, deadly venomous pit vipers decided to make this one Temple their home. In two's and three's, the snakes began to wriggle in through the doors, and, every year, more and more gathered.

Now, because of the demand by tourists, the snakes are encouraged to stay, and are brought gifts of eggs for food.

Although their bite can kill within seconds, the fumes of the sandalwood drug the snakes and they lie sleepily coiled around branches in the Temple.

The snake handler will oblige by selling nervous tourists more joss-sticks to tranquilise the snakes even more.

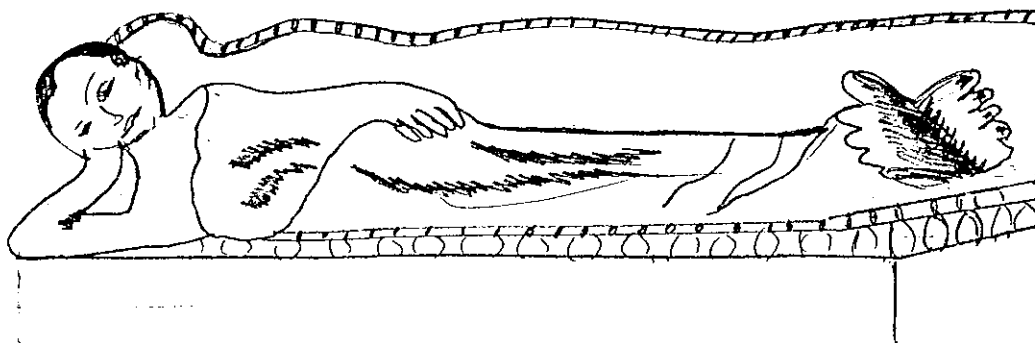
THE TEMPLE OF THE RECLINING BUDDHA

Also in Penang is another Temple where sandalwood - in the form of joss-sticks, plays an important role.

The smoke of the sandalwood carries the prayers of the faithful to the lotus feet of the Reclining Buddha, which is housed in the Temple.

This is one of the largest Buddhas in Malaysia - it took five years to build, is thirty three metres long and reclines on a thirty seven metre platform.

Surrounded by thirty thousand other carved figures of Buddha, the Reclining Buddha lies serenely - the focus of worship for thousands of visitors from all over Asia.



TWO TEMPLES IN KUALA LUMPUR

In early morning, Hindu worshippers gather outside one of the temples in Kuala Lumpur to begin their prayers of the day.

Each believer washes his eyes in the sacred flame, the element to which they believe all must return - the only perfect energy. Then the sandalwood is brought around by the Brahmin. First, ash is smeared on the forehead and then this is followed by the paste of sandalwood. It is a significant part of the ritualistic religious ceremony.

In another Temple, not far away, worshippers of a different kind pray to their God, an old Chinese General, by papering their prayers to the walls of the Temple and then burning them. Old men who are scribes, write prayers for the illiterate for a small fee.

That done, joss-sticks are burned by the worshippers who use this as a means of communicating with their ancestors.

This Temple is the centre of life in the community - there is even a school within. Inside, hundreds of mosquito-like coils of joss-sticks are suspended from the roof. The largest, which are twenty feet high, burn for four to five days and, everywhere, the fragrance of sandalwood permeates the air.

STAGES OF PRODUCTION

Sandalwood is exported in the form of logs, roots and butts, pieces, powder and shavings. No part of the tree is wasted.

Prior to 1919, sandalwood and oil distillation was on a small scale only and originally was produced from sandalwood obtained from the north-west of the State. During the period 1929-68, export of the sandalwood oil varied from 1800 to 5897 kg per year, but very little oil is now exported.

The sandalwood is pulled out of the ground, not felled or cut down, because the roots, butts, stems and branches are all valuable,

The wood was originally cleaned down to the heartwood with an adze, but, now it is cleaned by removal of the bark. When cleaned it is ready to be railed to Fremantle, where it is trimmed, sorted and packed for export, mainly to the expatriate Chinese in Taiwan, Hong Kong, Singapore, Malaya and Burma.

In the early days, camels and horses were used to pull the stems out of the ground and transport it back to the camp in drays to be cleaned and stacked, ready to be transported to the railhead by bullock teams.

Four-wheel drive vehicles and tractors are now used for the pulling, trucks transport the cleaned wood which is then loaded onto rail containers for transport to Fremantle, where it is prepared for export.

'THE PULLERS'

The life of the sandalwood producer always has been, and still is, very hard. Their living quarters were originally just canvas sheets or tents. Water was very scarce and Coolgardie safes acted as cooler boxes for storage of perishable food.

Nowadays, usually caravans are used as living quarters but water is still scarce and sometimes, it has to be transported long distances to the camps.

Because of the harsh conditions of the climate and the isolation of the work, many of the men only work for nine months of the year. They rely on the income they have earned to help them live for the rest of the year.

ANDY ANDREWS

- a sandalwood puller

In the STW-9 documentary, "The Million Dollar Tree", you will meet one of the dedicated men who live all year round in the bush, looking for sandalwood. Andy Andrews and his faithful dog, Giant, have set up camp in a corrugated tin hut, built by Andy himself, in dense bushland somewhere between Ninghan and Mt. Barker stations in the heart of Western Australia.

Every day, as the sun rises, Andy and Giant set off for a walk. Their purpose? To select an area of sandalwood for their day's work.

Andy does not use teams of horses and chains to gather his wood, his modern equivalent is a bull-dozer. But, it is not just demolition work - it is a highly skilled and delicate operation. The Forestry authorities insist that as little damage be done to the bush as possible and a surgeon's touch is needed to manoeuvre the dozer.

Once Andy has selected a tree, it must be pushed over and broken up. This saves time and labour. When the tree is laid flat, one job remains, that of trimming the small branches and roots. This has to be done by hand.

Some axemen, like Mark Smiley, (who you will meet in the documentary) can strip an average trunk in 25 seconds. In an hour, he can trim over 100.

After trimming, the lengths of timber are taken to another site for the next stage of preparation - the stripping of the logs. While some people still adopt the old-fashioned hand method of bark stripping, Andy prefers his own invention - an old two stroke motor with a belt drive to a chain flail. This strips the bark away quickly and Andy says he can halve the time of the traditional method.

Like a load of bleached bones, the wood arrives at the Fremantle factory. Once it is unloaded by hand, it is stripped again, down to the aromatic core. But, nothing is wasted, even the outer chips are packed and crated. Some of the high grade core wood is finely pounded before it is baled, while some is left as billets of timber.

The wood is baled and sent to destinations in the Orient for further processing.

THE MILLION DOLLAR TREE HAS MANY HEALTHY ROOTS

At every stage, the production of sandalwood still relies exclusively on muscle power. From the time the axe first bites deep into the tree, to the moment the last wisps of smoke rise to the beams of some temple roof, carrying a message beyond, a lot of human toil and labour has gone into this least known of West Australian industries.

By the time one small branch of the sandalwood tree is ready to be sold in a temple as a joss-stick, it will have had something like 16 hours of work lavished upon it.

In the last 150 years, the sandalwood trade has come a long way, although, these days, only about 120 people earn a living by cutting and collecting the sandalwood.

It is doubtful if, in the future, the supply of wood for joss-sticks will ever run out. Strict Government control ensures that the industry is safe for many years to come and this least known of exports will still play an important part in the trade of the State.

Sandalwood - the million dollar tree, does indeed have many healthy roots.