## SECTION 3 *Questions 28–40*

*Read the text on pages 112 and 113 and answer Questions 28–40.*

# KAURI GUM – a piece of New Zealand's history

**A**

The kauri tree is a massive forest tree native to New Zealand. Kauri once formed vast forests over much of the north of the country. Whereas now it is the wood of the kauri which is an important natural resource, in the past it was the tree's sap (the thick liquid which flows inside a tree) which, when hardened into gum, played an important role in New Zealand's early history.

After running from rips or tears in the bark of trees, the sap hardens to form the lumps of gum which eventually fall to the ground and are buried under layers of forest litter. The bark often splits where branches fork from the trunk, and gum accumulates there also.

The early European settlers in New Zealand collected and sold the gum. Gum fresh from the tree was soft and of low value but most of the gum which was harvested had been buried for thousands of years. This gum came in a bewildering variety of colours, degree of transparency and hardness, depending on the length and location of burial, as well as the health of the original tree and the area of the bleeding. Highest quality gum was hard and bright and was usually found at shallow depth on the hills. Lowest quality gum was soft, black or chalky and sugary and was usually found buried in swamps, where it had been in contact with water for a long time. Long periods in the sun or bush fires could transform dull, cloudy lumps into higher quality transparent gum.

**B**

Virtually all kauri gum was found in the regions of New Zealand where kauri forests grow today – from the middle of the North Island northwards. In Maori and early European times up until 1850, most gum collected was simply picked up from the ground, but, after that, the majority was recovered by digging.

**C**

The original inhabitants of New Zealand, the Maori, had experimented with kauri gum well before Europeans arrived at the beginning of the nineteenth century. They called it *kapia*, and found it of considerable use.

Fresh gum from trees was prized for its chewing quality, as was buried gum when softened in water and mixed with the juice of a local plant. A piece of gum was often passed around from mouth to mouth when people gathered together until it was all gone, or when they tired of chewing, it was laid aside for future use.

Kauri gum burns readily and was used by Maori people to light fires. Sometimes it was bound in grass, ignited and used as a torch by night fishermen to attract fish.

**D**

The first kauri gum to be exported from New Zealand was part of a cargo taken back to Australia and England by two early expeditions in 1814 and 1815. By the 1860s, kauri gum's reputation was well established in the overseas markets and European immigrants were joining the Maoris in collecting gum on the hills of northern New Zealand. As the surface gum became more scarce, spades were used to dig up the buried 'treasure'. The increasing number of diggers resulted in rapid growth of the kauri gum exports from 1,000 tons in 1860 to a maximum of over 10,000 tons in 1900.

For fifty years from about 1870 to 1920, the kauri gum industry was a major source of income for settlers in northern New Zealand. As these would-be farmers struggled to break in the land, many turned to gum-digging to earn enough money to support their families and pay for improvements to their farms until better times arrived. By the 1890s, there were 20,000 people engaged in gum-digging. Although many of these, such as farmers, women and children, were only part-time diggers, nearly 7,000 were full-timers. During times of economic difficulty, gum-digging was the only job available where the unemployed from many walks of life could earn a living, if they were prepared to work.

**E**

The first major commercial use of kauri gum was in the manufacture of high-grade furniture varnish, a kind of clear paint used to treat wood. The best and purest gum that was exported prior to 1910 was used in this way. Kauri gum was used in 70% of the oil varnishes being manufactured in England in the 1890s. It was favoured ahead of other gums because it was easier to process at lower temperatures. The cooler the process could be kept the better, as it meant a paler varnish could be produced.

About 1910, kauri gum was found to be a very suitable ingredient in the production of some kinds of floor coverings such as linoleum. In this way, a use was found for the vast quantities of poorer quality and less pure gum, that had up till then been discarded as waste. Kauri gum's importance in the manufacture of varnish and linoleum was displaced by synthetic alternatives in the 1930s.

**F**

Fossil kauri gum is rather soft and can be carved easily with a knife or polished with fine sandpaper. In the time of Queen Victoria of England (1837–1901), some pieces were made into fashionable amber beads that women wore around their necks. The occasional lump that contained preserved insects was prized for use in necklaces and bracelets. Many of the gum-diggers enjoyed the occasional spell of carving and produced a wide variety of small sculptured pieces. Many of these carvings can be seen today in local museums.

Over the years, kauri gum has also been used in a number of minor products, such as an ingredient in marine glue and candles. In the last decades it has had a very limited use in the manufacture of extremely high-grade varnish for violins, but the gum of the magnificent kauri tree remains an important part of New Zealand's history.