THE HIGH-TECH NYUNGAR

A new course offered by the Western Australian Museum, in conjunction with Bob Cooper Outdoor Education, aims to introduce participants to the innovative technologies used by Nyungar Aborigines in the manufacture of artefacts (see "Hunters & Gatherers", *LANDSCOPE*, Spring 1992 issue). It also aims to develop confidence in traditional Aboriginal lifestyles by hands-on manufacture of a set of quality hunting and foraging tools using traditional materials and methods.

The pilot course took place near Dwellingup on a weekend in late December, and Dr Peter Bindon, from the WA Museum's Department of Anthropology, gave practical demonstrations of each stage in the manufacture of each tool. He made it seem deceptively simple, but as each course participant gained confidence they found they were able to produce good quality and functional products with relative ease. However, the overwhelming impression that participants took away with them was that the ways of the aboriginal people, often considered primitive, were as high-tech (or possibly more so) as those of today.

For example, the technique used to fasten a barb onto a spear is not unlike modern-day fibre-glassing. After the spear point and barb have been carved, the barb is bound onto the point with sinews from a kangaroo tail and then waterproofed with a mixture of blackboy resin (taken from the stem), charcoal and kangaroo droppings, the latter providing the fibre to help the resin to bind. When set, this mixture is stronger than many modern glues. In many aboriginal cultures around the world, stones were bound to sticks to form axes. In WA, the stones were *glued* to the stick to form a "kodjer" or axe. It is only in the last 20 to 30 years that modern technology has developed synthetic glues that will stick wood to stone; the Nyungar people were doing it more than 10 000 years ago!

The resin and fibre technique was also used to make a "tarp" knife, which has a similar cutting action to a modern serrated tomato knife.

Peter Bindon demonstrates the technique used to produce razor-sharp slivers of stone.
Photo - David Gough

A small lump of resin is placed onto one side of a short, narrow stick and small flakes of rock with razor-sharp edges are embedded in the resin in a straight line along one end of the stick.

Other techniques learned at the course included the use of fire to straighten sticks for spears and digging tools, fire hardening of wood, making stone flakes, and greasing wooden tools with animal fat to prevent them from cracking as they dry.

Having seen how important fire was to each stage of manufacturing the basic hunting and foraging tools, the final part of the course was to produce fire using traditional methods.

Further courses are planned and details can be obtained by contacting Dr Bindon at the WA Museum on (09) 328 4411, or Bob Cooper on (09) 377 1767.

STRAPTOOTH BEAKED WHALE AT CABLE BEACH

Partly obscured by barnacles, the whale's 'strap tooth' can be seen growing over its upper jaw.
Photo - David Algaba

An unusual sighting has been made at Broome - a straptooth beaked whale (*Mesoplodon layardii*), not commonly found north of Karratha, which stranded recently at Cable Beach.

Unfortunately, the whale was dead.

To determine the cause of its death, samples were taken from the animal's internal organs, but it is believed it died of natural causes.

Wildlife officers Peter Trembath and David Algaba easily identified the specimen by its distinct lower jaw teeth, similar to tusks, which grow up and over the top jaw (in males only).

These whales occur in the southern oceans, living almost entirely on squid, and do not usually inhabit the tropical waters of the far north.

Adult straptooth beaked whales measure up to six metres in length and have a dolphin-shaped head.

Only males grow the strap-shaped teeth, which measure up to 35 centimetres long and four to five centimetres wide, are covered with enamel and taper like a rib toward the tip.

The flat teeth grow up and out, then tilt backwards at an angle of about 45 degrees (looking rather like inverted ribs) until they almost meet outside the mouth above the upper jaw.

With age, the whale ends up with a strap that acts like a muzzle across its beak and makes it impossible to open the mouth more than a centimetre or two.

With such dental restriction, it is puzzling how the straptooth beaked whale manages to catch and swallow anything. It is possible, however, that they suck food through the narrow opening like a giant vacuum cleaner.

LANDSCOPE

VOLUME EIGHT NO. 3 AUTUMN ISSUE 1993

'Where there's fire there's smoke'. We look at one of the lesser known and misunderstood products of bushfires on page 10.

The disappearance of the Zuytdorp *remained a mystery for many years. The story of its rediscovery and the formation of the Zuytdorp Nature Reserve is on page 42.*

Banksias and blackboys are normally associated with the sandplains of the coast and wheatbelt rather than the Great Victoria Desert. See page 22.

The mountains of the Stirling Range are a refuge harbouring many ancient species of spiders. Spider expert Barbara York Main shows us some of them on page 28.

A new book, Perth Outdoors, *aims to encourage people to get outdoors and enjoy nature and to learn more about Perth's unique natural communities. See page 35.*

FEATURES

REGULARS

COVER

The palisade spider (Neohomogona stirlingi***) is endemic to the Stirling and Porongurup Ranges. It builds a shallow burrow with an open entrance surrounded by a palisade, or collar of leaves and twigs, which may project several centimetres above the ground or litter.***

The illustration is by Philippa Nikulinsky.

Managing Editor: Ron Kawalilak
Editor: David Gough
Contributing Editors: Verna Costello,Grahame Rowland, Carolyn Thomson
Scientific and technical advice: Andrew Burbidge, Roger Underwood
Design and production: Sue Marais, Sandra Mitchell, Stacey Strickland
Finished art: Sue Marais
Advertising: Estelle de San Miguel ☎ (09) 389 8644 Fax: 389 8296
Illustration: Ian Dickinson, Kellee Merritt, Sandra Mitchell
Cartography: CALM Land Information Branch
Colour Separation by Prepress Services
Printed in Western Australia by Lamb Print

Published by Dr S Shea, Executive Director
Department of Conservation and Land Management,
50 Hayman Road, Como, Western Australia 6152.