OUT OF THE NEOLITHIC AGE

by Bernard Dixon

"There is an area on the Warren River between Pemberton and the coast which is particularly dear to me. I have spent many happy hours walking through its pennyroyal-scented meadows under the shade of karri cedars, or going through peppermint-covered slopes into the surrounding marri and karri forests. Other times, I have sat on a log, watching the tea-stained water as it drifts over the sandy bottom, past fallen trees and into deep black marron pools."

"I climbed up a bald granite rock near Albany and looked over the Southern Ocean. A severe frontal system had passed through during the last few days, and the waves were pounding on the rocks below, creating a salt spray which drifted inland as far as the Stirling Range. A huge albatross passed motionless on the wind, looking like some giant pterosaur."

Jan Taylor, writer and wildlife photographer, is a beguiling companion as he essays the delights and seductions of forest and glade, island and seascape, riverside and cave. His latest book, from which these extracts come, is a gentle, enthralling portrait of the delights of nature. Chapter by chapter, felicitous words, charming drawings and vivid colour pictures combine to sharpen our perceptions of natural things and to encourage reflection on our terrestrial companions. This begins to seem like the sort of book that goes well with a hazy sun, a glass of Muscadet, and the music of Frederick Delius.

But Jan Taylor, who graduated from Imperial College, London, before going to live in Australia, does not leave matters there. Instead he leads us, from his own observations and reflections, towards a serious analysis of the despoilation of the biosphere that has been caused by shortsighted industrial development and by feckless exploitation of natural resources. Then he begins to sketch the outlines of a strategy to reverse these trends and to establish truly sustainable development. Taylor's approach is based not on alternative technology, the implementation of a New Economic Order, or a return to the Dark Ages. It is securely founded on the principles and techniques of biotechnology.

Which is all very rum. One does not, frankly, expect a book entitled *Australia's Southwest and our Future*, published by Kangaroo Press and written by a bit of a dreamer with wild white hair, to have much good to say about biotechnology or genetic manipulation. When the author begins to wax lyrical concerning our oneness with nature ("In places such as this, one can feel the common force of life, which requires that the world's natural ecology remains in harmony"), it seems even less likely that he will go on to endorse science and technology as solutions to our planetary problems. One would be wrong. For that is precisely what Jan Taylor does in his remarkable book.

The thesis set out in this successor to *Flower Power in the Australian Bush and Garden* is based on one central truism—that the closer we get to the sources of primary production, the greater the productivity. Future societies, Taylor believes, will base their primary production on algae and cyanobacteria simply because these organisms are the fastest generators. "They can produce food at an incredible rate compared to wheat, and at an astronmical rate compared with beef or wool." Genetically engineered organisms will be used, in Taylor's assuredly Green world, to manufacture everything from beef protein and bread to paper, wool, plastics, and building materials—eventually replacing sheep and beef farming, forest-cut wood, and possibly even wheat and rice. "This massive new industry would be most efficient in the lands which have been laid bare by human mismanagement—the arid regions of the world—and have tremendous spin-offs in terms of power generation, waste recycling, and freshwater production. It could even put a value on greenhouse gasses and reverse the current build-up of carbon dioxide in the atmosphere."

It's easy to score points off this biotechnological Utopia, whether in terms of the palatability of algae or the lack of hard calculations concerning the energetics or economics of microbial power generation. The resistably titled *Australia's Southwest and our Future* does not set out to provide a detailed blueprint for every tactical and strategic advance from a petroleum- and nuclear-based world economy to one centred upon the microbe. What *is* impressive is the way in which Taylor's wanderings through his beloved Karri Forest, Rottnest Island, and Warren River bring him again and again towards biotechnology as the agent of industrially and ecologically desirable change in the world. For all the benefits (and excesses) of industrialisation, he sees us as rooted still in the habits of the Neolithic Age in our management of the environment and the planet. DNA provides the key to a possible Post-Neolithic Age in the future.

One example will suffice. Taylor argues cogently that alternatives to timber as a source of wood-pulp paper will *have* to be found, as the world's forests are depleted, and that future generations will be "open mouthed on hearing how long we went on cutting the trees down, and incredulous that some of the wood should have been used for woodchips." The answer, surely, will be the use of genetically engineered microorganisms to make cellulose fibers. But this does not mean that no one, ever again, should chop down a single tree. Wood can continue to be exploited for appropriate and traditional purposes (for example, in fine veneers). What needs to be ended is the wholesale rape of the Earth's forests—with benefits ranging from the aesthetic to the climatic.

An Australian reviewer has pointed out the affinity between Jan Taylor's endearing ramble and Henry Williamson's *Tarka the Otter*. The comparison is apposite. But neither its idyllic charm nor the parochialism implied by the title should lead to this book being lodged in a single, narrow pigeon-hole. Taylor has a message for us all.