

# **INVISIBLE COUNTRY**



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# **INVISIBLE COUNTRY**

**SOUTH-WEST  
AUSTRALIA:  
UNDERSTANDING  
A LANDSCAPE**

**BILL BUNBURY**



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Invisible Country is dedicated to the memory, the achievements and the generous contribution, the late and greatly missed historian, Geoffrey Bolton made to this book and many others. His own pioneering work, vividly expressed in *A Fine Country To Starve In*, a Social History of the Great Depression of the 1930s, in WA and his more recent *Environmental History, Spoils and Spoilers*, Australians make their environment, are just two works I could cite. Geoffrey Bolton has been an inspiration to many who seek to learn from the past and especially those who see the vital connection between land and people.

Bill Bunbury

## FOREWORD

Often our gaze is so captured by the exotic, the distant, the dramatic, the global images that swirl through our world that we fail to see what's right under our noses. At a time when these universal images threaten to obliterate our sense of the particular, valuing and telling stories about our place may be more important than ever. When it seems that the uniformity – and superficial glitz – of international popular culture is imperilling the grounded local, Bill Bunbury adjusts our line of sight so that we can begin to really see the effect we've had on the land where we live: the salinity in the wheatbelt paddocks and towns, the disappearing native mammals; the dieback attacking our peerless *Banksia* (and so much else); and how we diminish our own lives by degrading our environment in this way. In exploring the general bewilderment of the early European arrivals to our shores, he exposes our continuing, collective failure to learn from past mistakes and lays bare the pain we inflict in the process.

Using diaries and official documents, local histories and interviews, Bill puts his broadcaster's documentary skills to good effect, inviting us to wonder at what still remains of our unique and fragile wildlife, while questioning the mind sets that have wrought so much devastation. He does not hector or preach, but rather asks us to look dispassionately at the folly of behaving as if we had no choice in how we relate to our natural world. Through his informants, many of whom have witnessed the steady and inexorable despoliation of our forests and woodlands and waterways, he invites us to explore what we can do to live fruitfully in a warming, drying world where the old certainties are being overturned. He asks us to remember and learn from the

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Aboriginal people who were here before us and from the few, farsighted settlers who were able to discard their blinkers; and to celebrate those today who see what is and what needs to be done. People like Keith Bradby driving the restoration of vegetation and habitat in the inspiring Gondwana Link Project; like Nyungar leader, Eugene Eades who runs a centre at Nowanup to re-trace and re-connect with the old trails and dreaming tracks throughout the Stirling Ranges and the Porongorups.

While reading *Invisible Country*, I was reminded of my own family history, which is typical of so many of those who found themselves exiled, one way or another, in this unexpected land. Many of these voices are unrecorded and – perhaps unremarkable. Several were convicts, and they came without apparent prospects and probably without much hope either; they were extruded from their homes, miserable though they may have been. For the most part these weren't people who had either the time or the education to allow them to reflect publicly on their changed circumstances. They came with no understanding of the aboriginal people or the place – and appeared blind to both; clearing and controlling the land; eking out a living in conditions which were utterly unlike anything they had encountered before. Many of them were city dwellers to begin with, plucked from the slums of London and Dublin and Liverpool with few of the skills to farm the new land, which they could neither read nor understand.

In her essay on the Irish of Toodyay (my people), Rica Erickson traced the lives of some of these newcomers: she showed them working for the local “squires”, as my great great grandfather William Murphy did; as teamsters, cutting and selling sandalwood – the poor man's gold – until there was almost none left; capturing and selling the wild horses, which had already become very numerous; building roads and fences and shepherding sheep; in time acquiring their own lands through the system of special occupation leases; subduing the land and all its living things.

As Bill Bunbury so effectively documents, these habits die hard and appear, time and again, in official pronouncements and policy – and always in the guise of “progress”, a form of idolatry still practiced with pure faith, despite mounting evidence that the god has feet of clay. Not only do we need to stop worshipping false gods, we also need a more profound social commentary on what has been lost; of the absences which populate our lives; the tracks we leave over the

## FOREWORD

centuries, the mysterious and weathered scripts of our passing. The additions and subtractions most of are blind to without the eyes of writers and story tellers like Bill Bunbury.

It may seem strange that it should need to be said, but whether we are aware of it or not, we *are* deeply connected to and influenced by our environment; indeed, it is clear that our well-being depends on the quality of that relationship. Too often we – and our leaders – appear to take literally the biblical injunction that we should enjoy “dominion over all the earth”, adopting an exploitative separateness from our places that renders us blind to the destructive power of our actions to alter our environment and fray the links that bind us to the past.

But we do not simply *exist* in a physical environment, we also derive meaning and succour from it. And these meanings are not just individual ones but part of a shared fabric. Reading and understanding these detailed, local meanings is imperative if we are to avert some of the looming catastrophes of our globalised world. We have a profound need for connection with the natural world and cherished places. Jacobs has argued that such attachment to place is a deep human trait:

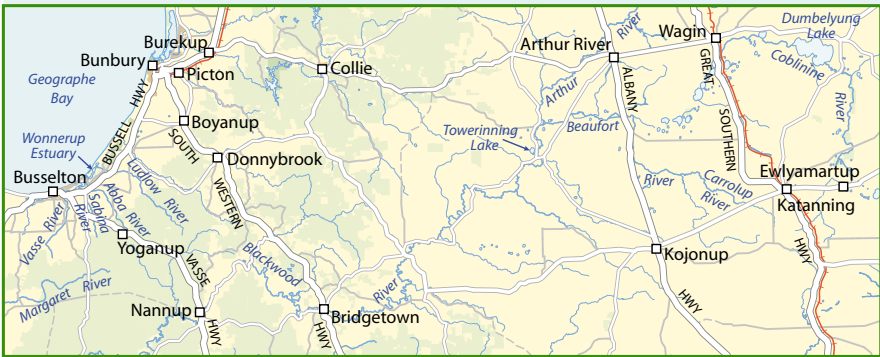
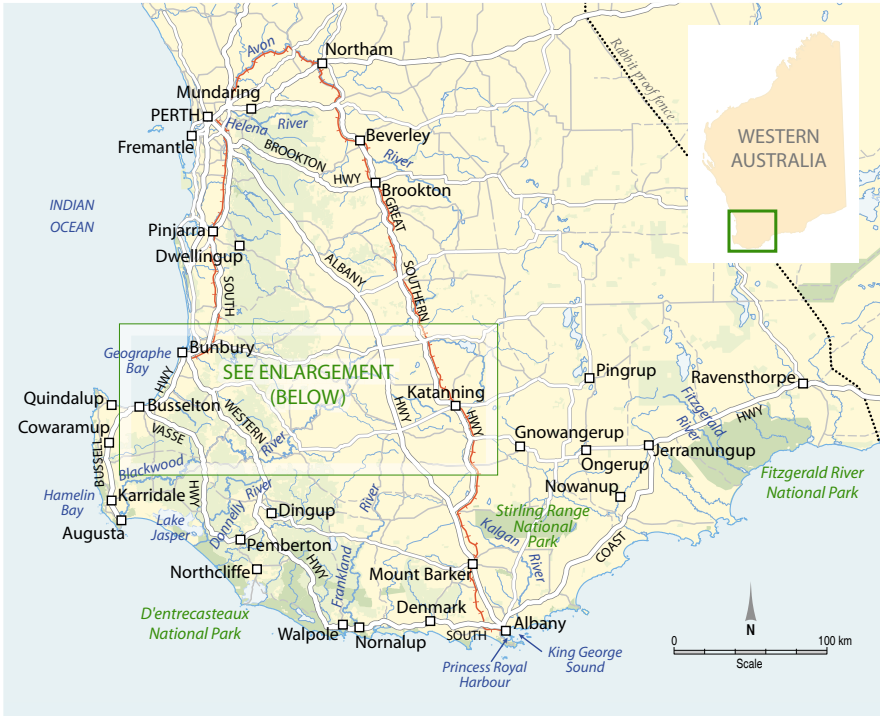
*People do not simply look out over a landscape and say ‘this belongs to me’. They say, ‘I belong to this’. Concern for familiar topography, for the places one knows, is not about the loss of a commodity, but about the loss of identity. People belong in the world: it gives them a home (p. 109).<sup>1</sup>*

Our relationships with the places we know and in which we live are not abstract, but intimate and intricate. As these places change, so do we. Even though we may only dimly apprehend the deeper human loss which ensues from the destruction of our environment, the effects are, nonetheless, real and lasting. This alone is reason to be grateful that Bill Bunbury has taken on the task of rendering our invisible country visible.

Professor Carmen Lawrence  
Chair, Australian Heritage Council

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<sup>1</sup> Jacobs, M. (1995). Sustainability and community: Environment, economic rationalism and sense of place. *Australian Planner*, 32, 2, 109–15.



South-west Western Australia

## Introduction

It struck me some time ago that when Europeans first settled in Western Australia, the land, particularly in the south-west, had withheld many of its secrets from these early nineteenth-century occupiers.

There were broad rivers, wide plains and tall forests, all of which, to European eyes, suggested promising sites for settlement. The land was also home to long-term inhabitants. Their presence, however, as writer and actor Phil Thomson reminded me several years ago, was

*not mentioned in the immigration brochures.*

To many new settlers these, the First Australians, were a puzzle. They seemed healthy. They moved freely through country which they knew intimately. Yet for Europeans, their lifestyle showed few familiar signs of a recognisable culture. There were no permanent dwellings, no bricks and mortar, no temples and no wheeled transport. In short, the locals' culture was not apparent to the newcomers. What few realised then was that Aboriginal

people and the land they lived in were indistinguishable. Failure to read the people made it hard to read the country. Both were potentially invisible.

And yet, as a few thoughtful outsiders, like Western Australian early colonial lawyer, landed proprietor and diarist George Fletcher Moore learned in the 1830s, the original inhabitants had useful things to say to the European newcomers – if they would listen.

This book details just four case studies of environmental change which have occurred since European settlement: developments that affected the rivers, forests and coastal plains of south-western Australia. These four ‘stories’ are book-ended by an examination of the historical perspective in which these changes have occurred and a final chapter which looks at different perceptions of a changed environment and the society it supports.

All of these major changes have occurred since the late 1820s, when the first Europeans arrived in the south-west. They tell a tale of lessons learned about an ancient country with unique and incredibly diverse ecosystems. We are still learning the secrets of this land, country that still challenges us as Wadjellas (whitefellers) to think in new ways about the home we have adopted.

But whether we have adapted to a new country remains for the moment unanswered. For the first Australians no such question existed. The land had adopted them.

In the course of compiling this book I have been made increasingly aware of two issues: the complexity of our natural world and the strong connections people, whether Aboriginal or non-Aboriginal, have to the place they call home. The south-west is a place with many ecological stories that can be shared if we wish to hear them.

In that context the Indigenous people have a powerful sense that the land owns people, not the other way around. But I have detected that more-recent arrivals have also developed a growing sense of place and identification with land.

## INTRODUCTION

I have talked with farmers who feel an obligation to the country that gives them a living and on which they live, and others, like foresters, tourist operators and ecologists, who find beauty in and express reverence for the piece of earth on which they stand.

For some readers these chapters may seem more like ‘verbal documentaries’ than conventional text. The style derives from my experience as a radio feature producer but it is an approach that I have also applied to my work as a writer. I have often found that conversations with those closely involved with an issue offer lively and direct comment and can make the issue discussed come alive for a listener or reader.

If the content of this book indicates that there are more questions than answers then I hope that this suggests that we are able to recognise ecological complexity when we meet it. I hope that we can then find it easier to talk these issues through in the community and find how to understand and care for a land that we are all lucky to live in.

It is probably useful to remember that we don’t live on land, we live in it.

Bill Bunbury



## Chapter 1

### More than a single walk

*I do not remember since leaving England, having passed a more dull, uninteresting time. The country viewed from an eminence, appears a woody plain, with here and there rounded and partly bare hills of granite protruding...Everywhere we found the soil sandy & very poor; it either supported a coarse vegetation of thin, low brushwood and wiry grass, or a forest of stunted trees...The general bright green color of the brushwood & other plants, viewed from a distance, seems to bespeak fertility. A single walk, however, will dispel such an illusion. And he who thinks like me, he will never wish to walk again in so uninviting a country.<sup>1</sup>*

Charles Darwin's 'single walk' traversing the country around the small settlement of Albany in March 1836 might have been just a little short to give the author of *On the Origin of Species* a full understanding of the landscape of south-western Australia. It needed a much longer journey.

We now know with reasonable certainty that our universe (we're not sure whether there are any others) started, or rather exploded into life, with a Big Bang 13.7 billion years ago. But

whoever or whatever triggered that first moment in what we humans call time, also set off a seemingly endless chain of cosmic and ultimately geological evolutions. And our planet, in itself a casualty or by-product of supernovae collapses, took shape aeons later and evolved to the point where life was eventually possible.

Three hundred million years ago one large supercontinent dominated the earth's surface: Pangaea. The name, taken from Greek, means 'entire earth'. This 'mother of terrestrial landmasses' included the Americas, Eurasia, India and Antarctica. Then, a hundred million years later, Pangea began to break up, re-forming into separate chunks of terra firma that are still vaguely recognisable today. A new Pangea sub-division, Gondwanaland, included *Terra Australis*, which was still attached to both India and the Antarctic, and was in itself an archipelago of large islands.<sup>2</sup>

Thirty-three million years ago our continent finally became one island and began to develop the features we still recognise: notably aridity and insularity and, as it drifted south from the equator, the Antipodean land mass became cooler.



Landscape east of Albany

As Professor Stephen Hopper recounts this ecological narrative, vast ice sheets then covered much of today's Australia, to a depth of five kilometres, flattening the landscape with consequences for the much-later arrival of mankind and, even more recently still, European humans.<sup>3</sup>

Parts of this now-distinct continent, notably the south-west of Western Australia, then lacked mountains and, consequently, many rivers. As rain from the oceans fell across flat land it distributed small amounts of sea-borne salt which built up over time. With few waterways there were not many natural drains to dilute or carry that salt back to the sea. Lakes and underground reservoirs stored gradually increasing quantities of salt. This salt might have largely stayed there but for the arrival of new settlers with European intentions for land use.

Today salinity in our wheat-growing country already presents problems and, while salt is a long-term element of our environmental inheritance, land-clearing practices have, quite literally, brought it to the surface.

But what of the land itself, created from such ancient cosmic evolution? What could it support? Crushed for aeons by ice, the soil of much of south-western Australia is deeply weathered and nutrient deficient. However, some remarkable plants have survived long-term climate variation. They have continued to evolve and adapt as separate land masses formed and conditions changed. As Stephen Hopper describes that process: 'In this region of Western Australia flora evolved to match its own habitat. Plants conserved their resources via long-lived root-stocks, leaves and seeds'.<sup>4</sup>

Much of this unique flora had survived what could have marked the end of life on earth 65 million years ago. That was when an enormous asteroid fell onto the Yucatán Peninsula in what is now Mexico, creating an enormous crater and much more besides. Massive dust clouds, thrown up by the impact, caused major climate change. Clouds blocked out the sun, creating extremely cold conditions, followed in turn by extreme heating,

as greenhouse gases in the earth's atmosphere then raised land temperatures to life-killing levels.<sup>5</sup>

Much of the animal and plant life that had evolved over previous aeons disappeared at this time. Dinosaurs and many other animal and plant species became extinct. However fossil records show that some of the unique plant life of this region not only existed before Yucatán but went on adapting and hence surviving.<sup>6</sup> In the Australian context, the arrival of Aboriginal people at least 40,000 years ago marked the first human impact on this continent.

Any long-term changes Aboriginal people made to the environment are hard to pinpoint, given the considerable length of their tenure, but we do know that they acquired, and still hold, an immense wealth of knowledge about the land, its flora and fauna and its life-giving waters. In a paper prepared in 2005, the Department of Water cited the importance of water to the Nyungar people of the south-west. The study found that:

*The Aboriginal people of the south west (known collectively as the Nyungar people) base much of their culture, identity and spirituality on their close association with groundwater. The Nyungars share these associations with Aboriginal groups throughout the Australian continent. Naturally, access to healthy freshwater sources was central to the survival of the Aboriginal people since they first arrived in Australia, and it has been argued that Aboriginal people are now so closely connected with groundwater in all its forms, that the long-term health of their culture depends on its maintenance.<sup>7</sup>*

While rivers and streams remained relatively unaffected by European occupation until the early twentieth century, large-scale land clearing in Western Australia commenced with nineteenth-century European settlement, and this made a greater environmental impact than the strategic forest management practised by the First Australians. Today, fortunately, there is growing recognition that while much of the original vegetation has been lost, we can still preserve part of this ancient and impressive heritage.

There is much to cherish. South-western Australia is known for having some of the most distinctive flora in the world, and the coast and hinterland between Albany and Esperance (Fitzgerald River, Ravensthorpe) is now internationally recognised as a biodiversity hotspot.<sup>8</sup>

However, it has taken us a long time to appreciate the unique and characteristic qualities of the ground we tread, farm, mine, play or build on. The English settlers who arrived in the Swan River colony in 1829 came into a country and met a people they did not understand. They also failed to recognise Aboriginal land-management practices. That in itself is understandable. The newcomers' perceptions of land were inevitably shaped by the landscapes of Europe, especially Britain, by then largely deforested and given over to an agricultural system centuries ago. The soils of Europe were younger, with a rich nutritional base which lent itself easily to both arable and animal farming.

Here in Australia the long-term tenants had lived by other means. They held a largely metaphysical sense of land where creation stories provided a kind of ecological and spiritual guidebook to country. For Nyungar people, the main inhabitants of south-western Australia, as for other indigenous Australians, landscape is a sustaining force, not just in terms of immediate need for food and shelter. It is also a vital presence in their lives. Anthropologist W. E. H. Stanner understood this well.

*No English words are good enough to give a sense of the links between an Aboriginal group and its homeland. Our word 'home', warm and suggestive though it is, does not match the Aboriginal word that may mean 'camp', 'hearth', 'country', 'everlasting home', 'totem place', 'life source', 'spirit centre' and much else all in one. Our word 'land' is too spare and meagre. We can now scarcely use it except with economic overtones unless we happen to be poets.<sup>9</sup>*

In many ways the Aboriginal interpretation of the origin of land and its inhabitants parallels the biblical creation account in Genesis. Their creation stories speak of huge movements of

earth and water, enriched through images of serpents and other creatures which create the landscape. But Aboriginal people also see an unbreakable unity in the elements that make up a landscape.

*As with the land, Aboriginal people conceptualise water sources such as rivers, lakes and wetlands to have derived from the Dreaming, a time when the world attained its present shape...Water is described as the living element that both creates and defines the shape and character of the country and gives it sacredness and identity.<sup>10</sup>*

It is no accident that many Nyungar names in the south-west end in the suffix ‘-up’: Gnowangerup, Kojonup, Boyanup, Cowaramup, Burekup etc. ‘Up’ means ‘place of’<sup>11</sup>, but a good place to live preferably includes water. Proximity to water meant not only a means of quenching thirst but also the capacity to catch animals for food, as edible creatures would also be drawn to the same life-giving streams.

Craig McVee, Chair of the Kojonup Aboriginal Corporation, explains the relationship.

*Wherever there’s a natural water resource, Aboriginal people have a real affection for it. It creates life from the waterhole, with the supply of water to animals and plants so it really supported the Aboriginal way of life.*

*Tradition has it that Aboriginal people didn’t actually camp on the water site. They camped away from the water sites to allow hunting to happen. This allowed the animals to come to the water to drink. But of course when the European settlers arrived they set up camp right on top of the waterholes and so the Aboriginal people had to find other places to hunt.<sup>12</sup>*

The sense of water as life-giving also embraced a deeply felt sense of the sacred and the practical. Anthropologist Kado Muir once explained this neatly in describing the function of gnamma holes, the ingenious stone-capped mini-reservoirs of water for dry times. As he saw it, the practice of ‘purification’, cleaning a gnamma hole, was not only an act of reverence and gratitude for the blessing of water, it was also essentially a hygienic act, ‘if water was to remain safe to drink’.<sup>13</sup>



Gnamma hole

It seems that we have taken a long time to accept that blessing. A hundred and fifty years on from European occupation of the Swan River Colony, the then Public Works Department decided to improve the flow of the Avon River through the Northam region, east of the Darling Escarpment. Farmers in the area had complained about annual flooding, but at the same time they also benefited from the large pools that the winter rains created, both for recreation and for watering their livestock.

Unfortunately the engineering work changed the Avon from a slowly flowing, but naturally dammed, water-course into a fast-flowing drain. Annoying natural obstacles like logs and trees which occupied islands mid-stream or overhung river banks were often removed to allow for faster drainage. The river's natural inhabitants – herons, ducks and pelicans – lost their habitats and food sources. River banks eroded as water flowed faster and fish populations declined sharply, and the Avon became more salty as a result of riparian clearing.

Some of the damage is now being repaired by government and other agencies, but the Avon River story exemplifies how long it has taken us to recognise and come to terms with our continent. A local Nyungar elder, Fred Collard, told me that in his childhood in the 1940s

*The water was lovely and clear and we used to dive from the top to the bottom to see who could reach the sand at the bottom. And we couldn't reach it. It must have been over twenty feet deep. Now it's only three to four feet deep. And you can't see the bottom any more.*<sup>14</sup>

Much of the Indigenous way of life was invisible to Europeans when they first encountered Aboriginal people. Outwardly there were few signs of what Westerners understood to represent 'civilisation'. They saw no recognisable permanent dwellings or temples and no wheeled transport. There was no evidence of horticulture, forestry, animal husbandry or tilling of fields, in the sense that Europeans understood these practices.

And while the newcomers found Aboriginal culture invisible, perhaps they also saw the land as needing taming, cultivating and rendering acceptable to their sense of country. We get a sense of their own cultural inheritance from a Biblical injunction in the Book of Isaiah, affirming that land is there for humanity to modify and subdue. That sense is strong in George Frederick Handel's magnificent eighteenth-century oratorio *Messiah*, which took its words from the Authorised Version of the Bible: 'Every valley shall be exalted, and every mountain and hill shall be made low: the crooked shall be made straight, and the rough places plain'.<sup>15</sup>

While this view of nature goes back a long way, in the European eighteenth century it was certainly still going strongly. This was, after all, the great age of landscape gardening: horticulture on a scale greater than backyards and including the clearing of large tracts of land and dredging for new waterways. It coincided with the expansive character of the British agrarian revolution which changed farming practices, replacing smallholdings with broadacre farms.

It was also difficult then, and still is, for many Europeans, to comprehend a spirituality that values land not as real estate but as a source of bounty, which in turn demands care of the country. When Austrian diplomat and botanist Baron Charles von Hugel visited the Swan River Colony shortly after its establishment, he lamented the poverty, as he saw it, of the Nyungar diet and lifestyle.

*Nature has been very niggardly in the matter of providing a livelihood for the Aborigines. There are no indigenous cereals, no fruit except a small berry, pleasant to taste but so minute that it would seem to have been created as a bad joke. There are no milk-producing animals and no domesticated animals except dogs, who consume part of their food supply. There are no wool-producing animals, no vegetables, and no tubers except for 'Dioscorrhoea' [sic] (yams).<sup>16</sup>*

Western Australian soil itself seemed incomprehensible. It certainly puzzled Von Hugel.

*As in so many respects New Holland is just the opposite to Europe and in fact to the rest of the world. The vegetation of the sandy coastal country and that of the deep soil of the hinterland are utterly different from each other. The sand is completely covered with a wide variety of luxuriant plants through which it is often difficult to make one's way, while, except for widely scattered large trees, the deep soil country carries hardly any vegetation, or, at most, only small insignificant plants.<sup>17</sup>*

Earlier still, Matthew Flinders, during his circumnavigation of the continent, had formed a similar impression when he explored the Albany hinterland in late December 1801.

*The country through which we passed in this excursion has but little to recommend it. The stony hills of the south coast were indeed covered with shrubs but there was rarely any depth of soil and no wood.*

*The soil of the hills is very barren, except near the sea coast, generally covered with wood, and that of the plains at the head of Princess Royal Harbour has been described as shallow and incapable of cultivation.<sup>18</sup>*

European occupation would involve cultural, agricultural and inevitably environmental implications, even if they were not recognised at the time. As historian Patricia Crawford has commented:

*When in 1826 the British established a settlement at Albany...they believed that property in land depended on cultivation...They argued that those who walked over the land, hunting and gathering, had no right of possession...Unoccupied land, according to British ideas, was to be rendered fruitful.<sup>19</sup>*

Interestingly, that earliest English settlement in Western Australia at Albany in 1826 was not typical of later occupations. King George Sound was initially established as a garrison to counteract potential rival French ambitions. Under Captain Collet Barker's command, soldiers were instructed to develop and maintain good relations with the locals.

Barker's record of that time, his *King George Sound Journal*, is filled with accounts of contact with the original inhabitants and, while he is critical of some of their customs, such as reprisal killings, he shows curiosity about their way of life, language and custom. The journal reveals no discussion of land ownership between Barker and Mokare, a local leader, from whom he learnt much about their way of life. Barker's task at Albany was not to prepare the region for future agricultural development. That would come hard on the heels of his departure. However, his final entry in his *King George Sound Journal* suggests a certain ambivalence about that prospect.

*Those who conceive that there is no independence except in the accumulation of money will mistake the meaning of the word as it is here used. N. S. Wales is not the country to realise a fortune, either by farming or grazing – at least those who do make fortunes by such pursuits must possess advantages not attainable by everyone and be gifted with acuteness and a spirit of enterprise which are more often found among merchants than farmers. The settler will, in most cases, have a little*

*money and it will or ought to be his happiness that he will have little occasion for it; he will be ready in the desirable situation contemplated by the poet: 'Happy the man whose wish and care. A few paternal acres bound.'*<sup>20</sup>

Are we hearing a warning here about modest ambitions for a new land or is Barker, very much in the sense of the eighteenth-century Age of Enlightenment, simply re-imaging an English rural idyll?

But whatever its rationale, the Barker garrison tenure (1828–31) was also a period of exploration and investigation of new country. In December 1829, Dr Thomas Wilson accompanied an expedition to map the country west of Albany. He describes the appearance of Rivetts Creek near the later site of St Werburgh's farm, not far from Mt Barker.

*...we observed that its banks were covered with luxuriant grass, sprinkled with yellow buttercups, which put us in mind of home...The alluvial soil, however, extends no great distance; but gently swelling lightly wooded adjacent hills are well adapted for sheep-walks.*<sup>21</sup>

Apart from the evident floral reminder of 'home', this passage carries the European sense of seeing a new landscape as an entity which its new tenants hope to redesign. Sheep, it is hoped, may safely graze in newer pastures.

New pasture meant less forest. That loss was foreshadowed early in the life of the Swan River Colony. In 1830 Captain Thomas Bannister set out on an expedition to survey the potential of land as far south-east as King George Sound (Albany). He kept notes of his progress.

*From the 23rd of December to the 5th January, we pursued a S E direction for 80 or 90 miles of actual distances, though in many tracts a country which surpassed our most sanguine expectations, a very great proportion of this tract was land of the first description fit for the plough, sheep or cattle. The beauty of the scenery in many places near to and distant from the rivers which we crossed, is equal to any I have seen in the*

*most cultivated timbered country in those parts of Europe where I have happened to have passed through.*

*The character of the country generally is undulating with here and there moderately high hills, some of them crowned with rocks...but there are broad, flat lands and valleys, the former of which...not unfrequently [sic] extended several miles, even in some places to a distance far beyond our power to ascertain...When I consider that the rivers, five of which we crossed not to mention the numerous water courses, some of which still had water in pools in them, traversed the country from East to West...I cannot but think that the Colony must possess a considerable quantity of fertile land in this part of its territory.<sup>22</sup>*

Bannister's ensuing report to Governor Sir James Stirling, *A Splendid Vision*, reiterated that optimism.

*I think that there is a body of available land with certain extensive tracts of the richest description fit for the plough, sheep or cattle or indeed any cultivation of the interior commencing about 25 or 30 miles north of King George's Sound, which, under the judicious system of colonization the main roads being made in the first instance by forced labour, would in the course of a few years become inhabited by thousands of industrious men sent out by their families in England, Scotland and Ireland or brought out by individuals bettering their own condition.<sup>23</sup>*

Eighty years later an 'industrious man' was singled out for praise at Moodiarrup, a settlement between the Blackwood and Beaufort rivers.

*Mr Hull has only been on his selection two years and has already 80 acres under wheat and oats...and he is fast clearing more of his land. He had in use an ordinary ship's winch, with which he was doing marvellous work, pulling down small and medium-sized trees and afterwards hauling them into piles for burning. It appeared to me almost incredible that one man could handle the class of timber which he was dealing with.<sup>24</sup>*

Historians Ian and Patricia Crawford have reminded us of a seemingly long-forgotten royal warning. In seventeenth-century

England, the Scottish King James I complained about his new domain that, 'If woods be suffered to be felled, as daily they are, there will be none left'.<sup>25</sup>

Does this suggest that an English heritage predisposed new settlers to tree removal? Land clearing began almost as soon as the settlers arrived and took up farmland, initially in the river valleys that ran behind and through the Darling Ranges. Early clearance was gradual and relatively small scale. It was slow, axe-driven work, unaided initially by mechanical assistance, but its effects were widespread. As the nineteenth century wore on, there were warnings. Botanist Ferdinand Von Mueller noted in 1879:

*But as nowhere, not even in the most extensive woodlands, can the supply of timber from natural forests be considered inexhaustible, a rational, far seeing provision for the maintenance (if not the enrichment) of its forest treasure is needful for West Australia, however indiminishable [sic] these may appear to be at present.*<sup>26</sup>

A century later Rhoda Glover's history of the Plantagenet Shire (1979) reveals change to those 'extensive woodlands'.

*This vast seemingly endless plain was described by the explorers Collie, Clint and Dale in 1831 and 1832. Eventually, 116 years later this plain carried twenty-five farms, each 2,400 acres, with 1,000 acres cleared, for future-selected soldier-settler owners. Its history of experiment, hope and success is a record of achievement, governmental and personal.*<sup>27</sup>

As farmland expanded forests fell, aided frequently by the new railways which then carried away agricultural produce. Rail lines linked settlements but they also helped to expand them. Wherever the steel lines ran, farms grew and woodlands shrank. In railway construction, the use of timber sleepers, and the hunger for locomotive fuel, the new steam-power, also consumed forests.

The 1889 completion of the Beverley to Albany railway line alone required a massive quantity of timber for sleepers. The logging company Millars was granted a licence to cut 50,000 acres of forest between the Deep and Frankland rivers in the far

south of the State; a region where trees grew to the water's edge and hence, once felled, offered the prospect of easy transport.

Almost forty years earlier (1st May 1850), the Colonial newspaper *The Enquirer* had already noted the proximity of trees to the shores of the Nornalup Inlet.

*If only the trees could be felled and taken across the bar in flat-bottomed boats of 150–200 tons, it would be possible to supply the Government dockyards in England and for the colony to attain a degree of importance in the eyes of the Home Government which it never before possessed.*<sup>28</sup>

Later investigation probably kept the inlet in a more natural state, suggesting that at the mouth of the inlet there was not enough clear water draught to lift such flat-bottomed boats, especially laden with felled karri.<sup>29</sup>

Towards the end of Western Australia's first European century, there was belated recognition that continuous clearing and parting with a valuable primary source was, in the long run, not in the colony's best interests.

Perhaps the first to voice that concern publicly was John Ednie Brown, the Scots-born inaugural Western Australian Conservator of Forests. In 1895 he was asked to write a *Report on the Forests of Western Australia* and a year later was appointed as their Protector. His 1896 report emphasised that:

*The loss to the state in the absolute destruction of the forest is a matter of grave responsibility to those who carry it out or even countenance it in any way...Forests are the natural regulator of climate and, therefore, it is man's duty to see that no action of his, in regard to these, leads to any disarrangements of nature's balance...I claim therefore that the forest reserve question should not always be dominated by that of the popular cry, 'the settlement of the land'.*<sup>30</sup>

Brown attempted to limit the loss of trees to agriculture and the growing timber industry. He was fighting an uphill battle. Already by 1896 nearly five hundred thousand acres (over two hundred thousand hectares) of timber concessions had been

granted in the south-west of WA. Timber company Millars held huge leases in the south-west and its practices then were scarcely sustainable. In some ways early forest exploitation resembled mining rather than silviculture. A visit to Denmark, WA, by the Scottish Agricultural Commission in 1910 describes the state of the district five years after Millars had abandoned tree cutting.

*Denmark is largely a place of abandoned wooden houses in all stages of decay. The devastated forest still retains enough of giant trunks erect and recumbent to tell of its wealth of timber before the axe and the fire wrought its ruin.*<sup>31</sup>

Denmark's picturesque appearance today is perhaps a tribute to the resilience of the karri tree despite earlier virtual quarrying. But at the end of the nineteenth century the south-west region was almost certainly facing a similar prospect of massive clearing, a practice that had already begun to change the landscape of the Great Southern and the central and northern wheatbelt.



Picturesque Denmark WA today.

When the Western Australian government set up the Forests Department in 1918, this amounted to a recognition that unlimited clearing for farms threatened the long-term survival of the forest itself. Huge tracts of land had already been cleared and burnt in the more lightly forested wheatbelt alone, and the south-west now risked the same fate.

Timber exporters had been at work on the west coast for many years. M. C. Davies had worked in eastern Australia as a supplier of wood for the Adelaide to Melbourne railway. Given the scarcity of suitable sleeper material along the proposed route, he then sought timber from the remote and sparsely populated jarrah and karri country of south-western WA. By 1875 Davies had established timber mills at Collie. Two years later he set up a large new mill at Karridale, north of Augusta.

Western Australian hardwood was now finding its way to England and France. Exported by sea from Hamelin Bay and Flinders Bay, the timber became railway sleepers, paving blocks and even garden fences for wealthy English families in the Home Counties. Much was cut from the superb stands of karri along the Leeuwin Ridge. By 1890 Davies was shipping away over 30 per cent of Western Australia's timber exports.



New jarrah fence in Caterham, Surrey,  
near London, c. 1901.

At that time timber cutting meant clearing large areas of trees and burning the remaining stumps. One remarkable survival from this practice is a superb stand of regenerated karri at Boranup, north of Hamelin Bay.

The story goes that after a fierce burn in autumn and a generous deposit of ash, good rainfall encouraged seed growth and an entire valley regenerated. However, it has taken more than a hundred years for this forest to reach something close to its original stature and magnificence.

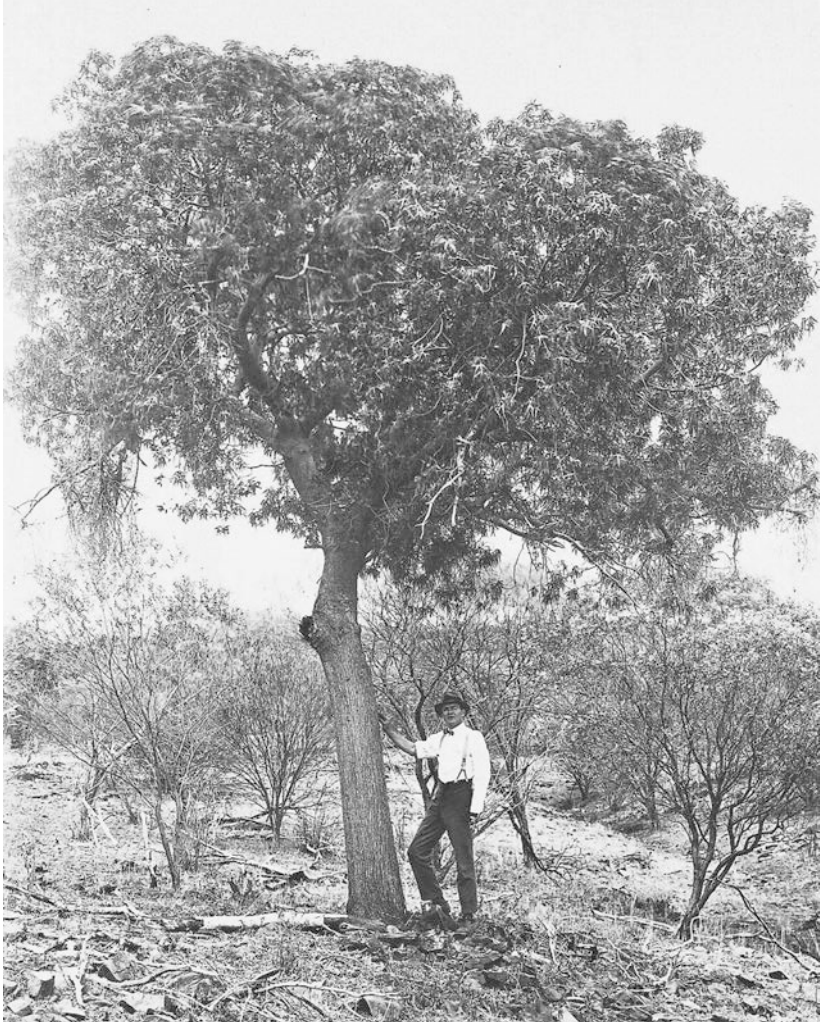


One hundred year karri regrowth, Boranup.

In Western Australia in the late nineteenth century strong commercial imperatives still dominated forestry thinking. The demand for timber itself was a major shaping factor. Hardwood was in demand for housing and bridge-building, and in the Eastern Goldfields the Kalgoorlie Woodlines were already supplying huge quantities of timber for pit props and fuel to be used in the rapidly expanding gold industry.

When Charles Lane Poole, a distinguished forester and early conservationist, came from England in 1916 to become Conservator

of Forests in Western Australia, he, like his predecessor Ednie Brown, argued for 'a publicity campaign in Western Australia, the object of which would be to form a strong public opinion regarding the proper management and utilisation of the forest heritage of the State...I consider that, by a publicity campaign, the democracy will realise the wealth that the forests represent'.<sup>32</sup>



Charles Lane Poole, WA Conservator of Forests, 1916–21.

While Lane Poole wrote the bill for the new *Forests Act 1918* in the hope that it would ensure forest survival through restraint and regeneration, he later resigned because the then State Government was determined to extend Millars' logging permits and thus threaten forest sustainability. He had hoped people would develop 'a forest conscience'.

More than sixty years later, long-time Manjimup resident Olive Robinson movingly demonstrated that she had acquired 'a forest conscience' but also that she had the intuition that in 1983 Western Australia still hadn't yet fully acquired one. She told me what karri trees meant to her personally: 'I feel that there's something unique, something majestic about them. I feel they are not really appreciated as they should be'.<sup>33</sup> That comment alone suggested an apt title for an early ABC Radio National feature I made on life in the south-west forests: *Something Unique, Something Majestic*.<sup>34</sup>



Karri on a south-west road.

Olive's description was echoed by another timber-town resident, Kathleen Ffoulkes, describing the felling of long-lived trees: 'You feel that it's a living thing that's gone. You felt something was dying every time you saw a tree fall.'<sup>35</sup>

The vital relationship between water, agricultural land and original woodland is a key to understanding the story of land change in Australia, and particularly in Western Australia given its vast landmass and original woodland cover. In *Contested Country*, the Crawfords describe the large-scale removal of native forest in the Northcliffe area in the 1920s. It was just one more major intrusion into the original landscape and was conceived as part of a post-World War I farm-creation scheme, known as Group Settlement.

Group Settlement was heavily backed by WA's then premier, and later governor, Sir James Mitchell. His idea was to encourage migrants from the British Isles and Australian city dwellers to try their luck at farming. A common incentive for both was unemployment here and in England. Some would-be farmers were displaced soldiers back from the trenches of Europe's 'war to end all wars'.

In Mitchell's view WA needed a proper dairy industry because milk and other dairy products were mainly imported from Victoria. His nickname 'Moo Cow Mitchell' is testimony to Mitchell's commitment to establishing small-scale farms throughout the south-west. Wherever the giant karri grew, he argued, good pasture could thrive, if, of course, you first took out the trees. Few at the time realised that the rich-looking brown loam, while it nourished karri, was not capable of creating lush English meadows.

If the professional agricultural scientists lacked that knowledge, the settlers and their families, now enticed from Britain to create farms of their own, were even less likely to understand the nature of the land they'd been allocated. Their task was simple but literally back-breaking. They were under orders to turn 'forest into field'. Some questioned that instruction.

Don Syme, son of a Group Settler, told the Crawfords of his father's reluctance to remove a small group of three or four trees as they were 'too good to destroy'.<sup>36</sup> Don was overruled by the foreman and the offending trees were duly felled. His son was both witness and executioner.

*Dad called me over and told me to ring-bark these beautiful creations, which I did, and in so doing, destroyed, in a few minutes, what the Master Creator had taken four or five hundred years to perfect.*<sup>37</sup>

Laura Mumford felt that the Group Settlers seemed driven, always under pressure. She and her husband were in a good position to observe. They had settled in Denmark several years before the onrush of Group Settlement and saw the newcomers arrive.

*Everybody was wanting to make something of themselves. They were going so quickly. And farming isn't a thing you can rush. My husband used to say, 'They're going mad. They're going too fast'.<sup>38</sup>*

The offspring of Group Settlers, with childhood time on their hands, were delighted with the country that was now their home. In Denmark, Peggy Cross recalls that in the one-teacher school she attended, her teacher drew his pupils' attention to the beauty of the bush environment in which they lived. Each Friday he took nature study classes in the country itself, with long walks to the ocean, studying the coastal wildflowers as they went.

*We used to have a wheel that was made up every month, as the wildflowers came out. We used to bring them to school and we were allowed to draw on this wheel the month and the date as to when that flower came out. And we had a complete twelve months' record. As a matter of fact I'd love to have that record now of all the wildflowers and orchids that we used to find. It gave us a lot of incentive to look for the flowers so that we could bring them along to draw them on this calendar wheel.*<sup>39</sup>

But for their parents there was little time to contemplate nature. Their work was hard and unremitting and for many set in a strange and unforgiving environment. Historian Geoffrey

Bolton observed, at least for adults, a sense of alienation: ‘Many of the settlers, the women especially, found the bush overpowering – surrounded by tall trees, very different from the cleared fields of England’.<sup>40</sup>

In the 1980s, and with the reflections of a lifetime among them, many settlers began to question the massive removal of trees. Jack Ricketts, a long time Denmark resident, felt that clearing of the karri forest along the south coast hills:

*...was wasteful and the timber was not put to any good use, just ring-barked or burnt. There was millions of dollars’ worth of timber just ruined through farming. I think it should never have been used for farming but kept as forest.*<sup>41</sup>

A reminder of what much of that forest might still look like, but for Group Settlement, comes from William Nairne Clark in 1841. He was then exploring the south coast for its agricultural potential. As he reached the Frankland River:



Cross cut sawing – early twentieth century.

*I saw many blue and white gum trees of enormous growth; one had the immense diameter of no less than 14 feet or 42 feet in circumference. If I had not seen this tree with my own eyes I would not have believed the fact.*<sup>42</sup>

Clearing so much timber in the 1920s proved a pyrrhic victory for many Group Settlers. The work was hard and exhausting and many of the blocks carved from the bush were too small, often less than a hundred hectares (247 acres), to be viable for dairy grazing. Their cattle frequently died from wasting diseases due to the lack of vital minerals in the original forest soil. The south-west dairy industry only began to show rewards after the addition of trace elements. Hard lessons from a land seemingly hard to read.

Another interesting description of this richly timbered coastal region in the 1920s comes from an American visitor, Ernest H. Wilson, Assistant Director of the Arnold Arboretum at Harvard University, when he visited the Nornalup district.

*You have got everything there, wonderful forest scenery, mountain ranges, seascapes, boating, fishing. It is one of the most beautiful sights I ever saw in all my life...It would be a great shame to parcel the land out for dairying country as had been done with the forest land at Denmark.*<sup>43</sup>



Group Settlement home near Denmark.

Much of the area described by Wilson was saved from agriculture, as it happened, by the same Sir James Mitchell who promoted Group Settlement and agricultural development so strongly elsewhere. Gary Muir, who now runs a tourist boat on the Walpole Inlet, described a significant Mitchell visit.

*In 1910 he brought his ministerial team to approve developments of these places. Imagine these guys turning up and saying 'Look at the great resources down here. We have got this amazing timber. Imagine being able to use the Walpole waterways for transport'.*

*But the situation changed when the French settler Pierre Boulanger (Bellanger), living on the Frankland River at Nornalup, hosted the party. He took them to some of the beautiful places, like the monastery landing where the mist had risen and formed a ceiling over the karri trees and the waters were still like a mirror and while they had been looking to exploit the natural resources of the area, suddenly they could see it in a quite different light. James Mitchell never forgot how moved he was by this expedition. In the following year, 1911, he said 'Why don't we reserve the waters as well as the forests and protect these reserves? And that was done.'<sup>44</sup>*

However, as his view of forests versus field showed, Mitchell was seldom swayed by the beauty of trees and had little concept of the fragility of the soil or the richness of the environment.

But we are all still learning about the real potential of the country we live in and how to look after it. Early clearing had been undertaken largely to establish agriculture, but it has taken us longer to see forests as a natural resource and not just as a commodity or an impediment to development.

When major clearing first took place, 'clear felling', as we term it today, was the favoured method of timber extraction. It was partly influenced by technology, or lack of it. Bullock or horse teams which carted away the felled trees could not easily get at a single tree. If, however, cutters could fell an entire block, they could drag the logs to a landing for removal from the forest. Even so, much timber lay where it fell.

Ted Pickersgill, who died in 1999 aged 94, worked in the south-west forests just after World War I. He recalled enormous wastage of jarrah and karri timber in the Pemberton district. He also talked about the destruction. 'When the cutters worked the timber they left fallen logs everywhere just lying to waste. They were just left there. The wastage would make you weep.'<sup>45</sup>

Arboreal management wasn't always under the eye of the Forests Department. It was often, *de facto*, in the hands of farmers. Twenty years or so after the Group Settlement Scheme, pressure to clear land in the south of the state continued.

Originally, farmland in the South Stirling region north-east of Albany was seen as good sheep-grazing country and requiring minimal clearing. But by the 1940s and early 1950s sheep were eating out the native grasses, and as farmers increased the size of their flocks, they expressed a need for bigger pastures. In 1948 one of the largest land development schemes then undertaken in Western Australia, the South Stirling Land Settlement, was launched. The plan was to develop 24,000 hectares of lightly timbered plain country north-east of Albany between the Kalgan River and the Stirling Ranges, and east and south to Manypeaks.

Rhoda Glover, in her *History of the Plantagenet Shire*, describes clearing in the Woogenellup district, west of the Kalgan River.

*The comparatively open parkland type of country was the first to be cleared. The large trees were ringbarked by chopping a groove around the trunk at convenient axe height. This cut off the sap supply and allowed the tree to die. The area would then be left for twelve months or so. Leaves, twigs, bark etc would fall from the trees and the whole area would become something of a tinder box. On a suitable summer day, after taking due precautions against burning neighbours out, the area was set alight.*

*Burning-off operations in those days were fraught with danger. Logs burned for several days after the fire and, should strong winds prevail, the risk of sparks lighting up adjacent land was always present.*<sup>46</sup>

Clearing land, while it allowed grass to grow, did not always create better pasture. An anecdote from the other side of the

continent might be helpful here. An early twentieth-century dairy farmer in the Hunter River district kept a farm diary, which his grandson found and inspected. His grandfather had kept meticulous records of his milk yield from the well-treed and shady pasture that his cows grazed. Later, his son, keen to have more pasture, felled the trees to gain more room for grass. His records revealed a decline in milk quantity. The grandson, in turn, when he inherited the farm, replanted shade-giving trees and his milk yield went back up to a level close to his grandfather's records. He had understood what his grandfather had noticed, that where trees shaded pasture, there was more morning dew and hence more moist grass.

Over-clearing the country of native vegetation has also brought other problems. Trees and shrubs hold down water tables and prevent that ancient legacy, salt, rising to the surface. Twentieth-century engineering and technology drew public attention to the problem. Salinity affecting our rivers was possibly first noticed by Chief Engineer C. Y. O'Connor during the construction of the Mundaring Weir to hold back the Helena River. Initial land clearing for the dam site in 1898 had caused salinity as the Helena Valley lost tree cover. O'Connor promptly initiated large-scale pine planting on the banks of the surrounding valley to hold down the water table and prevent the weir going salty.<sup>47</sup>

Further inland, in West Arthur, John Bird noted that:

*Clearing of the original jarrah and wandoo forest, for farming in the low rainfall areas of the catchment, caused groundwater levels to rise, bringing up the salt contamination. Unfortunately, the further step of controlling clearing on private land was not considered necessary. So with the advent of bulldozers in the 1950s and 1960s land clearing accelerated and the inflow of salinity into the waterways increased with it.*<sup>48</sup>

In more recent times reforestation in this region has attempted to correct the worst effects of salt contamination. But paradoxically, salinity, in our suddenly drier climate, as hydrologist Keith Barrett and others have suggested, has slowed as less water now rises to bring up salt.<sup>49</sup>

In the south-west of Australia we now face considerable ecological challenges. *Phytophthora Dieback* (formerly known as jarrah dieback), or, to name it more accurately, the pathogen *Phytophthora cinnamomi*, is responsible for the death or decline of many forest trees and shrubs. At the same time salinity in open country, as a consequence of early land-clearing practices, is causing loss of agricultural land, and introduced weeds have changed the dynamics of originally pristine areas.

Animal life has also been affected by our arrival. Broad-scale farming in some areas has resulted in loss of habitat for native animals. The numbat, Western Australia's animal emblem, is now a rare sight. Carnaby's black cockatoo, which once darkened the skies, is now a threatened species. Loss of habitat and invasion of its nests by European bees has reduced its numbers. Survivors form a rather elderly population which reduces the likelihood of reproduction; while the malleefowl, a flightless bird which once occupied woodland areas across much of the south-west, is also now in need of protection. In chapter three we will look at what steps some people are taking to improve their survival prospects.

It is easy for city dwellers to see environmental change as 'over the hills and far away'. But for a comment on the way the environment within the Perth Metropolitan Area has changed, it is hard to go past personal observations like those of author Bill Lines, describing the onset of winter rains as a child in Gosnells in the early 1960s, then a semi-rural settlement south of the city.

*At eight years old, I still believed I lived in a largely natural world, a world of predictable and cyclical change. I grew up familiar with the uncleared sandy plains of Gosnells, which supported a mosaic of vegetation dominated by woodlands of the common she-oak (Casuarina fraseriana) and banksia trees...*

*In the bush, life absorbed the violent changes and clearing of space caused by heavy rains, floods, winds, and droughts. Life even assimilated the violence of fire. For a very long time Australian species had evolved to absorb precisely this form and magnitude of violence.<sup>50</sup>*

Perth has now largely absorbed both the native bush and the citrus orchards of communities like Gosnells, and with that absorption, much of the physical evidence of the natural world available to an eight-year-old Bill Lines. Testimonies like his are invaluable as memory checks. Take his description of the coming of rain as he remembers it.

*Rain began when westerly winds replaced the hot dry easterlies of summer. One day each April a grey band of cloud appeared on the western horizon, thickened, and spread until the sky was completely overcast. Wind stirred, and the cloud cover lowered and formed a dark dense canopy...*

*The drizzle thickened, the dampness became cascades of droplets, and the rain steadied into a rhythmic pattering on bush and earth until the swales and plains of Gosnells were enveloped in the strokes of falling rain. Rain fell throughout the night. At dawn it was still raining and rain fell throughout the day...rain fell again, with successive days of drizzle, showers and hours of steadily falling rain. The water soaked through the earth and the sandy soil became saturated.<sup>51</sup>*

Reading a description like that in the second decade of the twenty-first century evokes, for older people at least, a memory of how rain used to fall in south-western Western Australia; a time when, as one forester described it, ‘the rain fell in lumps’.<sup>52</sup>

It is now beyond doubt that the south-west has suffered a considerable decline in rainfall from the mid-1970s onwards, and that factor has increasingly affected both the urban and the natural environment. Rainfall decline alone has sounded one of several alarm signals, but have we been listening and looking?

This book explores that question and many others.