CASINO MANAGEMENT AREA EIS AND MURWILLUMBAH MANAGEMENT AREA EIS SUPPORTING DOCUMENT No. 4

EUROPEAN HERITAGE: HISTORICAL REPORT NORTHERN REGION STATE FORESTS OF NEW SOUTH WALES

by

Blackmore & Associates

1993



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for State Forests of New South Wales

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DISCLAIMER

The findings of this report are based on the author's analysis and interpretation of the survey results. Views and interpretations presented in the report are those of the author and not necessarily those of the State Forests of New South Wales. The recommendations of the report are the opinion of the author.

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NOTE

The history of the region, Section 5.0, was written by Kate Blackmore and Bill Edmonds. Copyright is vested in both authors. Citation should similarly refer to both authors.

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CONTENTS

Ackn Note	owledg	gements		
1.0	Intro	duction	1	
2.0	Methodology			
	2.1	Literature Review	2 2 3	
	2.2	Fieldwork	3	
3.0	Anal	ysis	4	
	3.1	East coast development	4	
	3.2	NSW north coast	5	
	3.3	Forestry	6	
4.0	Disc	ussion	8	
5.0	Historical Overview			
	5.1	Simultaneous incursions	9	
	5.2	Diversification	12	
	5.3	State intervention	15	
	5.4	Forest Industries	16	
	5.5	The Forestry Commission	18	
	5.6	World War Two	20	
6.0	Reco	ommendations	23	
7.0	Bibli	ography	24	
Endn	otes to	5.0	27	

Appendix 1

1.0 INTRODUCTION

This Report of the Grafton, Casino and Murwillumbah Regions State Forests was commissioned on 14 July 1992 by Margules Groome Pöyry Pty Ltd (MGP) for State Forests of New South Wales (SFNSW) according to terms partially set out in SFNSW's Brief attached (Appendix 1).

Blackmore and Associates were commissioned by MGP to carry out the following components of the Brief.

1. Regional Overview

A review of existing reports and studies to present a broad picture of the European heritage of the region.

2. Evolution of Forest Industries

An examination of evolution of forest industries and activities and the associated pastoral grazing and mining land uses within the study area.

3. Historical Sources

An examination of all historical sources to identify the types of activities and the possible surviving historical resources within the area.

The constraints of both budget and time have had implications for the history of such an extensive area. One of the chief problems in assessing European heritage in these State Forests is that whilst there are histories of local regions, administrative and anecdotal histories of forestry generally, and local histories, there are no major secondary sources to utilise on these particular State Forests.

However, there is an imperative to develop assessment tools for evaluation of European sites. Therefore, the report utilises broad themes applicable to the east coast of Australia, the New South Wales north coast generally together with specific history of forest industries and evidence on a small number of sites as exemplary of either historical process or theme in order to facilitate development of predictive models.

1

2.0 METHODOLOGY

The Methodology for this study has consisted of a Literature Review and brief Fieldwork followed by an Analysis of findings.

2.1 Literature Review

As indicated by the Brief (p.3), three weeks were allocated to a literature review of the three Management Areas. This work was carried out both locally and in Sydney.

2.11 Local

Contact was made with the District Foresters (or their official representatives) in the three areas. Information was also obtained from relevant local Historical Societies; from New South Wales Department of Agriculture, Cattle Tick Control Office, Casino; from local Libraries; from New South Wales National Parks and Wildlife Service; and from interviews with select individuals.

Brief comment is required on material obtained from SFNSW. The history was not intended to be a piece of original research from primary sources, but rather an overview. However, the quantity and quality of material supplied by SFNSW in Grafton has resulted in a slight but unavoidable bias towards Grafton region particularly in the twentieth century history of forest use. At the time of writing, similar archival material to that supplied by Grafton was thought to be forthcoming for the other two Forest regions. Should this eventuate, such material should be incorporated into the history and, where necessary, into the recommendations.

2.12 Sydney

The archives or libraries of SFNSW and National Parks and Wildlife Service (NPWS) Headquarters and the Department of Planning were researched including reference to:

- Register of the National Estate
- National Trust Register
- State Heritage Inventory
 - NPWS Historic Place Register.

Although it is noted that Mount Remarkable gold mine on Sheep Station Creek is listed as an item of environmental heritage under the Nymboida Local Environmental Plan (1986), Local Council LEP heritage study schedules were not generally consulted (refer Brief p.2). This should form part of the historical archaeology brief or other work.

The collections of the New South Wales State Archives were briefly consulted as were the resources of the Mitchell Library and the library of the Royal Australian Historical Society. As a result an extensive collection of secondary source material pertaining to the region was obtained. (Refer Bibliography, Section 6).

2

2.2 Fieldwork

Although not part of the Brief, a three day inspection of sites considered representative of the three Forest areas by the district Forester Grafton, Bob Williams, in consultation with SFNSW Archaeologist, Roger Hall, was undertaken by the Principal Consultant.

These inspections included visits to Glenugie State Forest, Candole State Forest and Dalmorton State Forest.

Sites inspected included:

Glenugie State Forest

- remains of Tramway from rail line to Glenugie Peak including remains of basalt quarrying and crushing and associated timber-getting;
- remains of sawmill adjacent to Franklins Road.

Candole State Forest

- evidence of Tea-tree harvesting;
 - 1941 Foresters' camp with associated earlier post and rail stock yards and a slab leanto.

Dalmorton State Forest

- Cunglebung cottage slab construction with associated blacksmith's shop, post and rail fencing and other remains;
- tailings adjacent to Cunglebung Creek;
- trenches adjacent to Cunglebung Creek;
- miscellaneous industrial 'relics' such as a pit saw and an unidentified grinding device also near Creek;
- Blacksmiths Creek gold mine workings;
- Aboriginal sites.

The aim of the fieldwork, despite its brevity, was to obtain information on the likely extent and nature of existing remains or relics and their relationship to themes arising from the literature review.

3.0 ANALYSIS

Analysis of primary and secondary material relative to European heritage in conjunction with a brief site visit has revealed a number of historical processes and themes evident in this area which are common to the east coast of Australia. Others are specific to the north coast of New South Wales. The theme of 'forestry' is considered central to the study and is treated separately.

3.1 East coast development

Coastal (ribbon) development was slow in Australia, reliant as it was on the few major urban settlements for transport, provisions and trade. Settlement tended to spread from major towns - usually coastal - to agriculturally productive hinterlands rather than north or south along the coast. The sheer distance involved in traversing and exploring the east coast combined with lack of overland routes from the Tablelands and some difficult river entrances, to forestall exploration and subsequent settlement.

However, by the late 1830s, coastal forests and the economic value of their rainforest timbers rapidly became another productive resource for colonial governments. The rainforest timbers were generally depleted by the 1880s and with the concomitant effects of the Robertson Land Act, much of the land within these coastal rainforests was cleared.

Along with rainforest timbers, ecologically, went rich soils. Thus, typically, along the coast, where such forests had been cleared, agriculturalists took up the land with crops dictated partly by latitude and partly by the vicissitudes of a colony dependent upon exports. In time, this same land was also used for dairying.

Present day State Forests adjacent to the coast tend to be the residue of this process and are characterised by poor soils with agricultural activity of only marginal significance to the history of such Forests. This is true of Forest areas throughout the length of the coast. In Grafton region, Candole, Bom Bom and Fortis Creek Forests typify these areas of low soil fertility with high silica content.

Beyond the coastal forests, pastoralists, then graziers, represent the principal land users since European settlement. Indeed the extent of State Forests in this and other regions at the time of the passing of the 1916 Forestry Act gives an indication of the extent of land alienated by grazing. Because of this intimate physical connection between the two activities, there is considerable evidence of past and present use within many of the State Forests in the three regions as elsewhere along the eastern coast. In 1987 nearly two thirds of the Grafton region State Forests were leased for grazing.

Two other themes which have relevance to the entire east coast but have more specific regional importance are transport and recreation. In broad terms, the viability of coastal settlements depended on their proximity to markets and therefore on transport to and from such markets. However, while the process of lobbying for improved transport and communication with major towns of the hinterland and with (largely) coastal cities was

4

common to the whole coastal fringe, the development of such transport routes and types of transport varied from region to region. Similarly, while recreational use of coastal beaches has been fairly consistent along the coast, recreational use of inland environmental resources has varied according to the nature of the hinterland, its accessibility, promotion of the area and more general factors such as the recent emergence of green politics and an active environmental conservation lobby.

Finally, an activity which occurs along the east coast of Australia in and adjacent to forests is bee-keeping. Apiarists continue to use the forests under study.

In essence, then, the following national themes are represented in the three Forest regions:

- establishment, development and spread of grazing land with accompanying deforestation;
- marginal agricultural usage;
- nineteenth century development of basic transport and communication routes;
- small scale recreational usage, including creation of National Parks; and
- · bee-keeping.

The kind of material culture which might be found in the forests which would exemplify these themes includes a vast range of remains from complex sites such as that at Cunglebung, to ringbarked paddocks, disused roads, tracks and bridle paths, to bee-hives.

3.2 NSW North Coast

Climate, geological factors - hence soil - and relative isolation from Sydney until the midtwentieth century have been perhaps the chief factors which differentiate the development of this region from other coastal areas in New South Wales.

The sub-tropical, warm temperate climate has affected cropping - whether agricultural or for fodder - and together with soil type has dictated Forest tree species. The rich basalt soils near the coast have seen successive agricultural experimentation with sugar, bananas, cotton, macadamia and other crops. The significance of this cropping for the history of State Forests in the area has been the growth of population centres and the need for timber in the nineteenth and early twentieth centuries to drive steam engines required for crushing and other processing of sub-tropical crops together with depletion of forested areas. The rich basalt soils of the Big Scrub also saw intensive dairying with a tiny amount spilling over into the poor soils of much of the present day State Forests.

More specific to the region is the development of the Ti Tree Oil industry. Its intermittent fortunes from the 1920s to the present have been largely centred on the Richmond River region. Evidence of harvesting is scattered throughout State Forest areas in this region while specific (reported) evidence of processing - stills - exists in Gibberagee State Forest.

However, perhaps the most important regional activity for these Forest areas has been

mining. In Dalmorton State forest alone, over 90 kilograms of gold figures in recorded production along with three tonnes of molybdenum and four tonnes of bismuth. Mining features prominently in regional histories and reports and as late as 1987 gold deposits in Dalmorton, Clouds Creek and Sheas Knob State Forests were subject to renewed exploration.

Mining activity can be broadly divided into the three classifications of alluvial, open cut and underground. Because of the sheer physical extent of mining throughout these State Forests, remains of mining activity are widespread and varied in nature. Historical archaeological survey of the sites within the three State Forests under study is therefore required to determine the extent of each type, the likely type of remains and its relationship (historically) to the State Forests before European heritage significance can be assessed. For example, engine foundations were initially timber but tended to change to masonry as timber supplies were depleted in many mining areas of New South Wales and Victoria. It could therefore be hypothesised that within a forest area, with no shortage of timber, the use of timber would be greater and more prolonged than elsewhere and that because of the nature of the topography and transport routes in this region, iron structures would be fewer. The perishable nature of timber in conjunction with these latter factors points to greater emphasis on ground disturbance and processing residue rather than industrial artefacts in location and assessment of such sites.

One final theme, specific to the area, is state intervention to prevent the spread of cattle tick. The Quarantine Boundary Fences - double wire fences erected throughout the 1920s - were constructed to provide a natural line along the watershed of the Richmond Range and the Queensland border.

In summary then, the following themes characterise the region and are represented, to differing extents, in the three forest areas:

- agricultural diversification (generally marginal);
- tea-tree oil production;
- mining notably gold mining;
- dairying marginal;
- state intervention (grazing).

Kinds of material remains likely as a result of these regional historical themes are bare land due to cropping, stills and harvested remains of tea-tree clumps, an extraordinary diversity of industrial mining relics and artefacts, tick fencing and gates.

3.3 Forestry

Clearly, the theme of forestry is central to the European heritage assessment of State Forests. The history of forestry provides five fairly distinct periods of activity which have resulted in material remains in or near contemporary State Forests. These periods are:

- mid nineteenth century timber-getting especially rainforest timbers;
- post 1870s shift to conservation and regeneration without state support (establishment

6

of some forest reserves and creation of early state forests);

- state intervention in administration and control (forest Acts 1909, 1916 and 1924)) and subsequent dedication of State Forests;
- World War Two to mid 1960s massive exploitation due to greatly increased pressures and demands;
- 1960s to present re-regulation, tightening of controls over logging practices and quotas, loss of state forest to national park and impact of environmentalism generally.

Each is significant in the history of forestry. As a result, the kinds of material remains which exemplify European history include the remains of early sawmilling sites together with associated domestic evidence, tramways and spur lines, bridges and viaducts, marked trees and plantations, forest roads, fire towers, foresters' camps and huts and foreman's cottages, all of which are represented in varying degrees in the three forest areas under study.

Perhaps the most important aspect of these remains is their ability to display in toto a long and complex history of an industry vital to Australia both historically and contemporaneously. As a rule, each disused forest road is not of major significance in itself but forms part of a larger picture of forestry, indicating perhaps the difficulties of terrain, the spread of logging or even the nature of road-making. Conversely, the few foresters' camps still remaining are of intrinsic significance as well as being significant in the overall history of forestry.

4.0 DISCUSSION

While this report clearly identifies major themes which are represented in the three State Forests under study, and while examples of these themes can be alluded to, the sheer size of these forests precludes comprehensive archaeological survey. In addition, some of the themes identified - for example, marginal agriculture or bee-keeping - provide little physical evidence because of a lack of substantive industrial process on the sites. Furthermore, what evidence does exist on these sites does not normally warrant archaeological site survey. In such instances, material evidence is ephemeral and/or negligible and often there is ample documentary or oral evidence of historical process.

For example, cleared land, formerly used for banana growing, has marginal historical importance, makes no serious contribution to the history of agriculture in the region but is important as evidence or the existence of marginal agriculture in State Forests of the region. This significance can be documented without site survey.

In other instances, for example, grazing, evidence can range from cleared land and/or ringbarking to complex habitation associated with grazing such as that at Cunglebung. In this latter case, archaeological assessment and recording is an imperative.

In the case of forestry, perhaps the most complex theme, evidence can be a mixture of the most common forest 'artefact' such as forestry roads, together with rare or uncommon remains such as tramways or forest camps and ephemeral evidence such as marked trees from the 1920s.

In each case, assessment of European heritage significance must be based upon:

- the relationship of the item to an historical theme;
- the commonness of the item; and
- its contribution to the whole.

For example, Cunglebung, as a site associated with early grazing, easily relates to an identified theme. However, as a built complex it is uncommon if not exceptional. Partly because of its exceptional nature, it also contributes in a significant fashion to the history of grazing as a whole in the region.

Another example, Blacksmiths Creek gold mine workings is easily identifiable as associated with a major theme. However, the commonness or uniqueness of this site compared with many others could only be ascertained by archaeological survey of a sample of all types of mining sites. In addition, the contribution of this site to the history of mining in these forests could similarly only be ascertained after survey.

In summary, the history and themes should be used to initially identify sites or remains of potential significance. The commonness of such sites or remains then requires assessment and validation by an historical archaeologist. Finally, an informed decision needs to be made on the contribution of any one site or piece of evidence to the history of that particular theme taking into account the extent of other evidence.

8

5.0 HISTORICAL OVERVIEW

Introductory Note

The European history of the Grafton, Casino and Murwillumbah State Forests begins with contact history. To date scholarly work on European contacts with aboriginals in the region is very limited by comparison with that on prehistory, and the anecdotal nature of the available accounts makes them unreliable. It is therefore necessary to begin this overview without an assessment of contact history issues.

5.1 Simultaneous Incursions: Early pastoralism and timber getting

Squatters

Squatting in the Northern Rivers was the product of the first economic boom in New South Wales's colonial history, just as later kinds of settlement and land-use reflected other booms and busts both for the economy generally and for particular commodities. Driven by the wool boom, the population of the Colony (including Port Phillip) increased from 46,602 in 1828 to 129,463 in 1840.¹ Wool prices increased steadily until 1836, and good prices held until 1841. This was enough to encourage men of wealth, especially from Sydney, to expand grazing activities into the Clarence-Richmond valleys, then regarded as 'one large pastoral district'.² A coincidental factor was the drought of the late '30s in central and southern areas: apart from its cedar, what little was known about the North-East of NSW was that it had big rivers and a high rainfall.

Native grasses seemed to provide good prospects and between 1837 and 1843 graziers occupied most of the available flatlands in the two river valleys, predominantly for sheep at the outset, but increasingly for cattle as the humid conditions depleted sheep numbers via the high incidence of catarrh, foot-rot and liver-fluke. Because of its relative isolation, the area did not at first encourage heavy investment in labour-intensive land clearing or improvements, only in the livestock itself. The four prerequisites for economic success and therefore for sustained investment in grazing were initially lacking: secure tenure, plentiful labour, cheap transport, and government infrastructure.

All squatters had problems with tenure until the advent of fourteen-year leases in the socalled Unsettled Lands in 1847, but North Coast squatters had more difficulties than most in securing the other three prerequisites because of their geographical location. Labour was scarce after the abolition of assigned convict labour in 1840. Adequate transport began slowly with the first ports in the 1840s and 1850s at Grafton, Lismore, Ballina, Tumbulgum and Teranora.³ Government-funded infrastructure, notably policing, was minimal. In 1839 the Port Macquarie District was declared but it provided quite inadequate policing for the vast area it covered, which ran from the Macleay River to Moreton Bay. In the 1840s and 1850s there were only minimal improvements in the provision of police and legal services, the most important being the introduction of a Grafton-based Land Commissioner for the new Clarence Squatting District (1842), whose main role was to secure squatters from the dangers posed by bushrangers, Aborigines and disputes amongst themselves. But police and

9

court facilities remained minimal until the 1850s.4

As elsewhere the wool price slump of the 1840s hit the North Coast squatters hard, but they collaborated in the political agitation which by 1847 saw them triumph 'first over the British government which sought to restrict settlement, then over Governor Gipps' who had opposed long leases.⁵ Regionally, their survival strategy was to replace sheep with cattle, which had the side-benefit of being less labour-intensive. Labour costs were also lowered by the unemployment resulting from the general economic difficulties of the 1840s.

Low prices for meat in the 1840s and 1850s, the abundance of free firewood and the establishment of viable ports encouraged the squatters to turn to a new industry, tallow, from 1846. It became particularly lucrative in the 1850s, when world prices were high because the Crimean War cut off Russian supplies: worth £28 a ton in 1851, tallow was £58 a ton by the start of the next decade. The big plants were in the river settlements, but many graziers built boiling-down plants of their own: Hamilton and Denison of Wooroowoolgen in the 1850s, Charles Fawcett at Fairy Mount (Kyogle), Clark Irving (Cassino, 1846). Smaller stations like Lismore and Tunstall also processed tallow.⁶

The squatting interest sought to improve its prospects by the establishment of land transport routes, a particularly drawn out and arduous task in the North East. These were required both by the squatters east of the Dividing Range, to get stock in, and by those of the tablelands, who had since the 1820s been seeking a better route to Sydney than the six hundred mile haul via the Hunter Valley. These were to produce the first significant consequences of pastoralism for the forested uplands.

Within a few years of the finding of a track from New England to the coast in 1840, Craig's Line from Guyra, there were stock routes from Tenterfield, via the Sandy Hill Range, to Grafton, and from Glen Innes via the lower Nymboida at Hookes Crossing to South Grafton. In 1843, after a survey of the Richmond area, a dray route was established across the McPherson Range to the Logan Valley and Moreton Bay.⁷

By 1850, 65 stations in the Clarence District covered 2887 square miles, and all the good grazing land was gone. Richmond-Tweed pastoral leases spread to the Richmond Range in the west, the McPherson Range in the north and the margins of the Big Scrub in the North-East. Over the 1850s, the hitherto tenuous position of the squatters stabilized, with considerable consolidation of holdings.⁸

The long-term presence of grazing activity in the north east State forests is particularly well documented for Grafton District. One estimate from Forestry sources is that around 80% of the Grafton Management area has been subject to cattle grazing for the past 140 years.⁹ R. Margules's analysis of Forestry Commission records indicates initial and current grazing as follows for Grafton Area State forests: Glenugie 1840 (Paul and Scott' Run) - Lease and OP (Occupation Permit) (1992); Bom Bom 1840 - OP (1992); Southgate 1848 (Southgate Run); Boundary Creek (selected 1861) - OP (1992); Clouds Creek 1845 (Clouds Creek Run); Grange 1840 (Newbold Grange Run) - lease and OP (1992); Cangai 1845 (Cangai Run); Dalmorton

1844 (Buccarumbi Run) - lease and OP (1992); Pine Brush 1843 (Summervale Station) - OP (1992); Candole 1850 and Woodford N. and S. 1850 (Small's Run) - OP (1992). Margules assumes a history of grazing for Fortis Creek since the 1840s. For Sheas Knob and Marara, he mentions only rights and leases <u>circa</u> 1930.¹⁰

Less information is available for the Casino and Murwillumbah Districts. Casino District Forestry sources describe grazing as 'an integral part' of the Richmond Range forests since 'at least the early 1920s', initially for bullock teamsters, and indicate some grazing by the same period in the Ewingar/Washpool/Billimbimbra group. Murwillumbah District Forestry sources state that very little grazing now occurs in this District's State Forests and provide no clues to its early history.¹¹ Where grazing has an extensive past, man-made remnants of the industry in the present State Forests are likely to be largely in the form of fences and cattle yards rather than more substantial structures. Cunglebung 'homestead' is an important exception.

Quarantine Boundary Fences - tick fences - erected in forested areas in the 1920s to contain the southward spread of cattle ticks, remain in State Forests throughout the North East Districts.

With the permanent establishment of the pastoral industry came the development of a complex of bridle trails and stock routes, some of which were later made up into vehicular roads. While there is a great deal of reference to these in local histories and forestry reports, judgements on their historical significance would require a major study of the development of local transport and communications in connection with that of industries and the major settlements. It is clear, however, that where remnants of 19th century tracks and roads exist in State Forests, they are significant evidence of the early struggle against a topography which isolated much of the region well into the 20th century. Such remnants reportedly include parts of the old Tweed road, the Nightcap track (Whian Whian SF) the old Glen Innes - Grafton road, Cunglebung ford, Razorback road, and a road from Cambridge Plateau to Simpkins Creek.

Cedar-getters

An essential characteristic of northern NSW east of the tablelands is that patterns of development were at no stage determined solely, or even predominantly, as they were to the west, by pastoral interests. Almost simultaneous with the invasion of the squatters was that of the cedar-getters. Again, the 1830s boom was the catalyst, generating plenty of small capital to support ventures in a potentially lucrative field of investment for a much smaller initial outlay than grazing required.

As southern supplies were depleted, cedar-cutting moved north, reaching the Clarence in 1835, the Richmond by late 1842 and the Tweed by 1844. The last main source of supply, along the Brunswick River, was cut in 1849-50 and again in the 1860s. This rapidly expanding exploitation of cedar reflected the convergent interests of sawyers, shippers and boatbuilders with Sydney merchant capital and with government, which wanted both export income and cedar-cutters' licence fees, £6 by the 1850s.¹²

This had major national as well as regional significance. The heavy and virtually uncontrolled cutting of cedar from the forests of northern NSW was important not only in generating a large part of the export earnings which fuelled growth in the mid-nineteenth century (in 1829 timber was the Colony's third biggest export after wool and fisheries) but later in generating the first public concern about timber resource management.¹³ From the 1860s, the Sydney press began to report the disappearance of the cedar. 'In about twenty years such a thing as a cedar tree will not be found in the country.' 'The cedar...forests are pretty well exhausted excepting on the mountain ranges. It took twenty years to fell and burn down the cedar brushes in the Clarence.' According to a report by Charles Moore in 1870, cedar was now available 'only sparingly' except from the Richmond and Tweed.¹⁴ In the latter areas cutting continued far from sparingly: according to Bolton, yearly production in the Richmond area was 3.5 million feet in the early 1870s, plus 5.5 million feet of pine. In 1836 total cedar exports from NSW had been less than 2 million feet.¹⁵ But early concern produced little action.

The immediate consequence of this boom was the penetration of timber-getters and their saw-pits into the higher forests. Already in 1857 along the Richmond 'It is clear that...the sawyers spread out a long distance to cut it...continually forming new camps' and by the 1870s it was being sought in the 'far back mountain brushes of the Upper Richmond'.¹⁶ By this time, however, the cutters of cedar included not only specialists but part-timers. They belonged to a new wave of European settlers, the selectors, who were to make the greatest impact on the shape of the northern forests in the second half of the nineteenth century.

5.2 Diversification of the regional economy

Intensive agriculture around the forests of the North Coast was made possible by the fertile alluviums of the Tweed, Richmond and Clarence river valleys, and the exceptionally rich red soils of decomposed granite (Kraznozems) in the rainforests of the Big Scrub. It was made a reality by government legislation in response to a combination of ideological, political and population pressures. First, there was the growing nineteenth century confidence that industrious British man armed with scientific knowledge and encouraged by liberal legislation - liberal in the sense of liberating the creative potential of the individual - and protecting the resulting wealth, could turn all of nature to his own purposes. Second, there was the conviction that working the land was productive of social stability, moral improvement, sound family values and patriotic citizenship, not to mention national wealth.

From the 1830s, urban populist politicians, opponents of the squatting monopoly of both land and government, and sponsors of British emigration to Australia like John Dunmore Lang, had been spreading these values in support of closer settlement. The third element in the historical conjuncture was the population growth of the 1840s and 1850s, fuelled in the later years by the gold rushes, with their unsettling social and political effects.¹⁷ The outcome was the Crown Lands Alienation and Occupation Acts of 1861, usually referred to as the Robertson Land Acts. These allowed would-be farmers to select and occupy Crown Lands between 40 and 320 acres in districts defined as Unsettled (which included most of the North Coast region away from the ports and rivers) on a down payment of 5/- per acre, to be brought up to a pound per acre within three years.

A condition of selection was that specified improvements be made to the value of a pound per acre, including construction of dwellings, fencing, clearing and cultivation. For income while the slow process of clearing and firing timber gave ground for crops, many selectors and their sons went cutting cedar and pine. As their land became cultivable, they introduced maize, the main crop in the 1860s, but problems with transport and price fluctuations led to experiments with arrowroot, cotton, and sugar cane. Cane was the boom crop of the 1870s: 500 acres of it in the Richmond valley in 1871 expanded to 6500 in 1875. But again international prices fluctuated and bad seasons took the gloss off sugar.¹⁸

The cheapest form of improvement of the land was clearing. Thus, one of the main consequences of the Robertson Acts was the elimination of forests wherever there was rich soil, as in the case of the Big Scrub rainforests. Ten years after the arrival of the first selectors there in 1864, the sugar boom of the 1870s was rapidly converting the Big Scrub to farmland. Thus the history of sugar in the North East has more relevance to the forests which have gone than to those which remain.¹⁹

After twenty years of the Robertson Acts closer settlement had resulted in a mixed agriculture producing maize, sugar, molasses, bananas, pigs and fowls to supplement the established beef, tallow and hides. And in the ten years from 1871 the European population of the Richmond River district almost doubled from 4,528 to 8,504.²⁰

It seems clear that compared to grazing, little of this new agricultural activity occurred in what are now State Forests. Nevertheless, some types of farming spread to the fringes of forest areas, and remained on these peripheries well into the twentieth century. Banana growing, in particular, has involved use of State Forests on Occupation Permit, in some cases by Italian and Yugoslav immigrants living at the barest levels of subsistence.²¹ They are part of the unique history of European agriculture in this region, which D.N. Jeans has argued offered more diverse options to the small farmer than any other part of NSW, even if many of the options have been economically marginal.²²

Dairying was the next major North Coast boom. Seen by many as the ideal agricultural usage for the richer soils of the region, it was started on the path to becoming a major industry by the arrival of experienced Illawarra farmers in search of cheaper land. This was in the 1880s: 'the beginning of a dairy farmers' migration path which followed basalt soils from the south coast to the Big Scrub'.²³ The number of dairy cows on the North Coast increased 250% between 1897 and 1907, and the North Coast's contribution to total NSW butter production grew from less than a quarter to more than a half in the same period.²⁴ As with sugar, this had more to do with former forests than present ones, but some dairy farming occurred on the margins of State Forests. Ron Jordan's recollection about a struggling farm selected near Gibberagee SF in 1906 have been recorded by Pauline Curby. The land was barely adequate for dairying. There were 'twelve in our family and to make a living Dad used to have to cut timber and sleepers in between milking'. Like others nearby, the farm was sold out in the late 1930s (to Forestry, according to this account).²⁵

These recollections include reference to a small but characteristic North East Coast rural industry, tea-tree oil, which provided an income supplement for small farmers but also encouraged more substantial investment. The market for the oil of Melaleuca Alternifolia as a solvent and germicide was recognised in the 1920s, and this plant occurred abundantly in swampy areas of the North-East. 'We had sixteen men working on a tea-tree oil distillery on our property...about 1930...there was another big one but they closed that up because the tea-tree wasn't sufficient - way down at Bungawalbyn'. These large stills were run by the now defunct Australian Essential Oils Co. from about 1927, but many farmers had stills of their own, for example around Burgawalbyn Creek, near Moonem, Woodburn and Whiporie.²⁶

The tea-tree oil industry needs to be recorded as an element in the diversity of regional agricultural activities encouraged by local flora, climates and the need for farmers on the less fertile land to exploit whatever sources of income they could find.

Less important than agriculture for the regional economy, but still important in terms of the history of the State Forests, was mining. Gold finds in the North-East were reported early in the NSW Gold Rush period (e.g. on Cloud's Creek Station in 1851) but the region's own mini-rushes did not occur until the 1870s, and they were on a far smaller scale than those further south. Around Solferino and Lionsville and at Bulldog Creek (in the present Ewingar SF) there was alluvial and reef-mining. About two thousand miners were said to be working in the Solferino Goldfield, the largest in the area, when it was proclaimed in 1873.²⁷ To the South, the Nymboida and Chambigne Creek Goldfield was proclaimed in 1873, and 170 men were said to be working in the area in 1889, mostly mining quartz reefs.²⁸ The most specific evidence available at present on the location of gold mines is for sixteen sites north of Dalmorton, another late nineteenth century gold town. Some of these are in Dalmorton SF.²⁹ While output has not been high by national standards, and operations have been on a small scale, this industry has had an intermittent physical impact on the forests to the West of Casino and Grafton Districts for well over a hundred years. No evidence has been found that mining for copper, bismuth, molybdenum or other minerals occurred in existing State Forests.

The most important factors in the economic and population growth of North Eastern NSW in the 19th century were clearly the success of diverse local industries - grazing, cedar, pine, hardwoods, shipbuilding and intensive farming. Government funded infrastructure was slow in coming in the remoter districts, though regular but infrequent postal services began in the 1860s. Sustained attempts to get government funding for rail links foundered on the costs involved in building tracks through the ranges, and on interminable local rivalries, particularly between Clarence and Richmond interests, as to the best routes. Finally the Lismore-Byron Bay-Murwillumbah railway was authorised in 1890. But it was to be 1932 before the northern rivers region was linked with Sydney, when the Clarence River was finally bridged between Grafton and South Grafton. The long delay perpetuated a sense of isolation and encouraged 'new state' separatist feelings well into the 20th century.³⁰

By the end of the 19th century, it was primarily on the coast and in the main river towns that industrial investment, expansion of administrative facilities, technological change and later, tourism, were becoming concentrated. This left the forested uplands moving at a slower pace. Material remains within them are likely to reflect the European activities of the nineteenth century rather than the changes of the twentieth. There is an obvious exception to this generalisation: the impact of forest management by the State.

5.3 The Intervention of the State

The emergence of the State in the twentieth century as a major presence in the remaining forested areas of NSW has sometimes been represented as the outcome of a continuous process of policy improvement starting with the first attempts of early colonial governors to prohibit tree felling in certain areas and to raise revenue from timber getters.³¹ Neither of these forms of intervention, however, was significant before the 1870s or systematic before the second decade of the twentieth century. Concern about waste of cedar resources had been expressed as early as 1826, and various licensing and other regulations followed, focussing on cedar in the '20s and '30s, then on revenue generation from timbergetting generally in the 1850s and 1860s, as it became practicable to collect licence fees through the establishment of Crown Commissioners in the unsettled districts. The limited impact of these measures is indicated by the average income of the government calculated by Grant for sixteen years between 1850 and 1870: $\pounds_{1,831/10/.32}$

The shift in the 1870s towards attempts to conserve, regenerate, or plant forests 'has been seen as a first step for forestry in NSW'.³³ Certainly it saw the establishment of the first forest reserves in the Murray and Clarence River districts (190,235 hectares for the latter) in 1871, then the 1878 Timber Regulations pursuant to the 1875 Crown Lands Amendment Act, creating State Forests as well as Timber Reserves.³⁴ For the next forty years, however, 'The protection of the forest domain appears to have been nearly always subordinated to the policy of settlement'.³⁵ This partly reflects the fact that the administration of the forests was principally by a Branch of the Department of Lands, with occasional transfers of responsibility to the Department of Mines and three years (1889-92) as a Department under the Colonial Secretary's office. But then, as a result of financial stringency during the 1893 depression, forest administration reverted to Branch status in Lands again. Under steady political pressure, the Department of Lands devoted itself consistently to opening up agricultural land for settlement and to the management of water resources. Forests came a distant third.³⁶

There was clearly concern for aesthetic and ecological values threatened by uncontrolled forest exploitation.³⁷ But such concerns had little weight against the predominant obsession with Closer Settlement, and the populist-nationalist myth of Australia Unlimited, a land of endless opportunity and resources if only governments and vested interests could be forced to unlock them.³⁸ Pressures for exerting State control over the forests developed within the NSW bureaucracy, and measures for implementing it were introduced despite the hostility or indifference of public opinion, not to mention the resistance of established timber interests. One factor encouraging the NSW Government to act was certainly the increasing cost of timber imports into the State (rising from £460,414 in 1885-1886 to £793,102 in 1910-11), and another was concern over problems in the supply of timber for public works.³⁹ Even

then, the strong recommendations of the 1907 Royal Commission on Forestry, notably that sufficient funds and training be provided to police forest regulations, were not taken up in the Forest Act of 1909.⁴⁰ Nevertheless, there was sufficient political will to bring about the declaration of important areas of State Forest in 1913 to prevent further losses to settlement.

While further research is necessary into their origin, the key Forestry Acts of 1916 and 1924 seem to have been pushed on by the desire for self-sufficiency in resources. This desire was increased by the First World War. The 1916 Act finally provided NSW with the legislative means to establish effective forest management. Key elements were the creation of a Forestry Commission, the provision that revocation of State Forests could only be done under the Act, and the allotment of half of forest revenue to support forest works, including production of timber. The Forestry Commission was thus in a position to become a significant employer on the North Coast, and forests in NSW were no longer 'the half-forgotten poor relation in the resources trinity'.⁴¹

The 1909, 1916 and 1924 Acts and their impact on the North-East forests are therefore of national as well as State and regional significance. Their most durable legacy remains the State Forests themselves, mostly dedicated between 1913-14, and the early 1920s.

5.4 Forest Industries 1880s-1930s

The virtual extinction of cedar meant timbergetters switched where they could to hoop pine. It was drawn from much the same areas where cedar had been found. Trade in this timber was booming in 1908, with thirty bullock teams working on the Nymboida-South Grafton road. It was used for house building plywood, and butter boxes after a shortage of suitable New Zealand white pine.⁴²

Railway building accelerated the cutting of North Coast timbers both directly, by providing a market, and indirectly by providing an alternative to coastal shipping for exports from the region and encouraging clearance for settlement. There were railways linking Lismore and Murwillumbah by 1894, Grafton and Lismore by 1905, and Maitland and South Grafton by 1923.⁴³

From the 1880s, there was increasing recognition of the value of North Coast hardwoods for construction work like bridges, wharves and railways, particularly Grey Ironbark, Tallowwood, Grey Gum, Blackbutt, Spotted Gum, Red Mahogany, White Mahogany, Stringybark, Forest Red Gum, Grey Box, Brush Box, Turpentine, Blue Gum and Flooded Gum.⁴⁴ Once again the most substantial and durable evidence of the increasing trade in these larger-volume timber resources lies in the big coastal centres, where substantial capital was invested in large sawmills at Coraki (Yabsley's and Yeager's, 1880-82), and others at North Lismore, Goonellabah and Tatham.⁴⁵

With logging moving further from the coast, the options were either the economies of scale offered by large mills close to the points of shipment, or building smaller ones close to the timber-cutters, to reduce transport costs. With no commercial mill around Lionsville, for example, and in the absence of navigable waterways, logs were snigged to dumps and pitsawn into flitches then taken by wagon via Copmanhurst to Moleville to be shipped by drogher to Grafton. But it took six days for the teams to get from Copmanhurst to the scrub and back, and five or six days more to get the timber to the droghers.⁴⁶ Transport costs which might be acceptable for high-value cedar were not for other timbers, and consequently small bush mills became commonplace in the more inaccessible timbergetting areas of NSW.

The bush mills created a specific kind of small, specialised, isolated community, whose location often changed as saleable timber was cut out. 'Most mills employed between 10 and 20 men in the mill itself', with other labourers felling and hauling the timber.⁴⁷ There might also be a blacksmith. Families lived on site in company cottages.

Horse driven mills died out in the nineteenth century, and steam became the standard source of power. Experiments with water-driven mills were rarely successful.⁴⁸ Despite low profits and the difficulty of competing with imported US softwoods, which were often preferred by builders to local hardwoods and produced by much larger and more cost-efficient operations, the small sawmills proliferated from the 1870s to the 1940s. From a total of 104 in NSW in 1870 their number grew to 346 in 1890 and 630 in 1910/11. The total of licensed sawmills was recorded as 513 in 1930.⁴⁹ It appears that the number of mills declined during the First World War, built up in the immediate post-war years, then stabilized, only to decline again in the Depression. World War Two was to expand the industry again.

Sawmillers were extremely poorly paid throughout this period. 'Except for the year 1895, their wage was consistently lower than, say, blacksmiths.' With the introduction of awards, wages increased until the early 1920s, then were held down. There was a sharp wage decline of 20% in the first three years of the Depression (1929-31). Many would sign on for less than the award, or try to exist on part-time work, or work without pay in the hope of a job. The Timber Workers' Union seems to have been ineffective in rural areas until the late 1930s.⁵⁰

Sleeper cutting provided a still more marginal income. In 1934 piece rates were 1/6 per sleeper, with output per day from eight sleepers to twenty but no income at all when the weather was bad. In terms of pay and conditions, the circumstances of these forest workers were harsh even by contemporary standards. Forestry Commission workers were considerably better off.⁵¹

Until the late 1920s, the technology associated with these forest activities was based on hand tools, draught animals, and steam powered machinery (e.g. circular saws, traction engines in the '20s), though there were many adaptations of available techniques to local circumstances. The remains of a flying fox reported near Lion's Head would be an interesting example.⁵²

A major early innovation in the transportation of timber was the sawmill tramway, introduced from the late nineteenth century at many forestry sites. At first bullocks or horses pulled the wagons along light, narrow gauge rails of wood or iron, but small steam locomotives were increasingly used from the 1920s on. Building the lines involved 'heavy earthworks...done by pick and shovel, horse dray and dynamite, with ingenious bush engineering to construct bridges and viaducts out of the local timber.⁵³ None of the forest

tramways listed by Grant as existing at the time of the 1907 Royal Commission was in the three Forestry Districts under consideration, nor was any of the 30 listed as being granted Occupation Permits by the Forestry Commission between 1917 and 1930. The tramway remains in Glenugie State Forest are connected with the transport of ballast for railway building. There are, however, reports of tramway logging in Gibberagee SF, Ext.8.⁵⁴

Widespread use of motorised vehicles from the 1930s and the commencement of large-scale forest road construction from about 1934 led to the closing down of those tramways which were still operating in the 1940s. Petrol and diesel powered trucks also caused the demise of the bullock teams, made doubly redundant by their slowness and the unsuitability of iron-shod wheels for bituminised roads.⁵⁵

5.5 The Forestry Commission

From the 1920s, Forestry Commission workers became a significant presence in the northern forests. Officers of the Forestry Conservancy Branch and later the Commission had been involved in checking licences and collecting royalties since 1882. The first cadet forester, E.H.F. Swain, was appointed in 1899 by R. Dalrymple Hay, the chief administrator of forest policy in NSW between 1896 and 1926. Swain has left extensive notes on his work in the North Coast forests in the first years of the century.⁵⁶ But it was not until the 1916 Act that forestry officers had extensive powers to intervene in the activities of the timber industry, marking trees for felling, policing felling procedures and collecting royalties on a new and more elaborate sliding-rate basis. There were 189 NSW Forestry Commission employees in 1917, 442 in 1925 (121 of them Officers) and 473 in 1929 (130 Officers). The number of employees dipped during the early years of the Depression, but increased rapidly from 1934 as forest work was used to absorb the unemployed. The number of Officers grew steadily through the '30s and '40s, and that of other employees only went below 1,000 in 1943-45. Revenue and expenditure figures give some idea of the increased intensity of the State's involvement with the timber industry and the forests.⁵⁷

Reven	nue £	Expenditure £		
1910-1911	87,618	26,695		
1920-1921	190,742	179,540		
1928	226,668	212,858		

With increased manpower and resources came a broad range of Forestry Commission silvicultural activities. Timber Stand Improvement (TSI) was done in NSW as early as 1911 and was thus described to Helen Hannah by a Forestry foreman: 'Everything that was crooked was felled. If we came on bigger trees that were no good, we'd ringbark them. ... The regrowth would come up around it. When the regrowth came, go through and thin it out. The rest was left to grow into timber.' TSI activities are extensively recorded in Regional Forestry Records.⁵⁸

Plantation experiments by the Forestry Branch began on a small scale in the 1880s, but the

early trials met with little success except for radiata pine at Gosford, and they did not involve the North East areas until after World War One. Then in August 1919, W.G. Ashford, the Minister of Lands and Forests who had seen the 1916 Act through the NSW Parliament, announced a program of softwood afforestation. His speech underlined the government's pecuniary interest in forests: to counter 'the high prices of softwoods and the shortage in the home supply'.⁵⁹ Early North-Eastern District plantations included <u>Pinus radiata</u> at Mt Pikapene SF 170 (1920-34), since converted to Hoop Pine except for 8 hectares; Hoop Pine at Mt Pikapene (1922-); and Slash Pine and Loblolly Pine at Banyabba SF 737 (1921-).⁶⁰

Under R. Dalrymple Hay, the Forestry Commission began a program of Working Plans for State Forests immediately after the 1916 Act gave it responsibility to control and manage them. By 1925-26, 451,226 hectares were given under Working Plans, though the development of further plans was then stopped in favour of implementing existing ones. It was resumed under the title of Management Plans in 1939-40. Surviving copies of 1920s Working Plans contain information about forest condition and related local economic activity with considerable value for local, regional and national economic, ecological and social history, as well as for the history of forest policy and its implementation. The 1923 Myrtle SF 559 Working Plan, for example, has as its object 'the production of prime hardwoods...to meet the demands of the adjoining closely settled lands'. It assesses the quality of the timber remaining after earlier felling of the best native trees, markets (mainly local, the surplus to Grafton and Casino), rainfall, climate and soil formation, revenues and expenditures since 1918, fire protection, silvicultural treatment, supervision of logging and grazing.⁶¹

A full history of the impact of forest management could only be written on the basis of thorough analysis of surviving Working and Management Plans. The extent of Commission activities varied from district to district, and in some was very limited before the 1940s. In the Murwillumbah District, close supervision of logging only became possible with the appointment of a forest foreman about 1928. A forester was appointed to Mullumbimby in 1935. Not until about 1940 was administration of the District transferred from Casino to Murwillumbah.⁶²

As in the earlier years, most of the dwellings constructed by forest workers in the inter-war period were temporary, though occasionally mills would remain in one spot for a decade or two. Mill cottages were sometimes built on skids to facilitate relocation. Sleeper-cutters used tents or bark humpies, while Forestry Commission employees, including foremen and foresters were issued with eight foot by ten foot cottage-type tents and cooked their meals at large galvanised iron galleys. More permanent structures in the forests included overnight huts, fire huts and fire lookout towers. Construction of the latter was accelerated from 1934 by governmental funds provided to Forestry to relieve unemployment.⁶³

More durable accommodation began to be erected by the Forestry Commission during and particularly after the Second World War, with camps for 10-30 men often using ex-army huts. In Whian Whian SF, for example, Mebbin Headquarters were constructed in 1942, Whian Whian HQ and Camp in 1948, and Peate's Mountain Fire Tower in 1948. A foresters' camp consisting of two huts and other outbuildings remains in Candole SF along with a (reported) 1947 fire hut originally connected by phone line to Pine Brush HQ.⁶⁴ Such

structures are physical evidence of a new, major phase of intensified forest industry activities and State supervision of them.

5.6 World War Two and the postwar boom

World War Two was a turning point in the history of forestry and forest industries. Imports fell, but demand for forest products escalated rapidly in response to war-time activities like ship-building, wharf construction and weapons manufacture. This demand continued to increase after the war throughout the 'long boom', the years of economic prosperity that lasted into the mid 1970s.

During the war, the Forestry Commission under E.H.F. Swain was involved in complex policy negotiations with State and Commonwealth price-fixing authorities in an attempt to maximise output. It began the war period still dealing with the unemployment relief programs which had been delegated to it by the State government without adequate funding. Then the war brought shortages of machinery and skilled labour. According to a forester working in Whian Whian SF in these years, it also brought a considerable relaxation in harvesting rules and cutting procedures.⁶⁵ Important technical improvements in areas such as communications, fire-protection, haulage machinery and aerial photography emerged from the war.⁶⁶ But so did a substantial demand for massive post-war reconstruction and house building.

Initially this demand was met by State Forests and in 1958 60% of the total cut of timber of New South Wales came from the North Coast. In Coffs Harbour Forest District alone there were 100 mills employing around 2 000 men.⁶⁷ At this time the industry was reported to be operating at its highest capacity (94%).⁶⁸ Mechanisation within the industry such as the introduction of one-man operated chain saws in the late 1950s, replacement of bullock teams and horses by crawler tractors, rubber-tyred skidders and other snigging equipment, combined with improved transport, both by road and rail, and developments in mill technology, created an increasingly efficient and productive industry.⁶⁹ Yet despite this seemingly buoyant economy, in 1961 the sawmilling industry experienced what one commentator described as its worst crisis since the Great Depression.⁷⁰

There were a number of factors contributing to this crisis. In 1959/60, local production of sawn timber in New South Wales reached 382 million super feet while local demand was 560 million super feet. Imports - notably oregon - increasingly met the shortfall in supply and did so with assistance from the State by its removal of certain import restrictions in November 1960.⁷¹ At the same time credit restrictions produced a slump in housing construction around Australia. However, perhaps one of the most important contributing factors was the changing nature of forestry itself. At the same time that the industry accepted the necessity for technological change and made itself competitive, as seen for example in the rebuilding of the Lawrence sawmill by J. Notaras and Sons in 1955, governments finally accepted forestry advice on the finite nature of the forest resource.⁷²

As early as 1951, a review of State Forests indicated that existing native forest could not support then current usage.⁷³ In the ensuing decade, 'sustained yield' became a forest

management policy. In 1962, sustained yield policy commenced in Mullumbimby sub-district of Murwillumbah Management Area and in the Bom Bom Forest Group in Grafton Management Area.⁷⁴ During the 1960s, traditional areas of supply and quotas in Grafton area were suspended. Sawmills were forced to amalgamate along with their quotas and transfer their activity to Grafton.⁷⁵

The combined effect of these factors was dramatic. In the Grafton Management Area, State Forest yields in 1964/5 were the lowest on record since 1935/6 and recovery to pre 1962 levels was not reached until 1970.⁷⁶ In New South Wales overall, timber yield in 1961/2 fell to the 1952/3 level.⁷⁷

As far as forest practices were concerned, silvicultural and conservation practices put into effect intermittently due to lack of funding and state commitment (prior to the 1960s), were gradually transformed into state sponsored forest management policies. The 'creaming' of preferred hardwood species ceased in Murwillumbah Management Area in 1960 when a tree marking system was introduced in order to improve and intensify forest regeneration.⁷⁸ Also, the experimental hardwood plantation program in Whian Whian and Mebbin State Forests in the same area which ceased in 1954 due to lack of funds, emerged again as part of a highly successful silvicultural policy during the 1970s and 1980s. In this instance technological developments such as the introduction of 'jiffy pots', use of bulldozers for selective clearing, together with prompt burning of logging slash facilitated development of such policy.⁷⁹ However, other developments during the 1960s and 70s were to have a profound impact on forestry on the north coast and elsewhere.

Increasing affluence in the years preceding the mid 1970s recession, combined with improvement of rural roads and increased availability of off-road recreational vehicles, created a surge of 'bush' tourism which has perhaps not peaked. As far as the State Forests are concerned, this new tourism meant that increasing numbers of people were able to gain access to previously inaccessible forest areas. In 1972 legislation extended the objects of the Commission to include promotion and encouragement of recreation.⁸⁰ This coincided with the emergence of environmentalism as a significant political force.

Environmentalism and the forest

Arguably, the strength of environmentalism as a political force in Australia lies in its cities. It was the cities that fostered activism and that housed the educated middle class who together with unions and affected residents created a stumbling block to development in Sydney's Rocks area and in Woolloomooloo in the early 1970s.⁸¹ In New South Wales, unlike Tasmania, Victoria or the Northern Territory, the natural environment has been slow to emerge on the political agenda. Perhaps due to a lack of unexplored and significant mineral resources, perhaps due to political climate, it was only in the late 1970s that forests - notably rainforests - gained political significance and media headlines.⁸²

Wildlife conservation had been an official element in forest policy since a 1932 Act provided for the declaration of National Forests with multiple aims including 'to conserve the wildlife of the bush.⁸³ In 1972 another Act extended multiple use objectives to all the Commission's

activities: principally, the conservation and utilisation of timber 'to the best advantage of the State', the provision of adequate timber supplies, and the preservation of soil and water resources, but also recreation, and conservation of birds and animals. At the same time, the Commission was to take 'all practicable steps that it considers necessary or desirable to ensure the preservation and enhancement of the quality of the environment'.⁸⁴

These objectives cannot easily be reconciled with each other, and this has led to criticism of forest policy by groups with environmental concerns.⁸⁵ World-wide campaigns against the destruction of tropical rainforests fed disquiet about logging in NSW subtropical rainforests.

In the 1970s, the North-East forests became a major focus of conservationist lobbying involving both local residents and groups such as the National Parks Association. Government sensitivity to such pressure led to the establishment of the Border Ranges National Park from 1979. A second campaign, which began in 1975, became a landmark in the rise of conservationist political activism. Carron connects this with the fact that the cheap land of the North East had attracted a population of former city-dwellers seeking an alternative lifestyle. The campaign against the Forestry Commission logging in parts of the Terania Creek catchment led to confrontations involving hundreds of protestors, timber workers and police between 1979 and 1981, and to splits in the NSW government. These were resolved by a judicial enquiry and declaration of the area as a National Park in 1983.⁸⁶

It may seem ironic that State Forests which were established in many cases to combat political pressures to open up land for farming are being revoked in response to a new kind of city-based movement whose values are the reverse of those of the 'closer settlement' advocates. But this entanglement of forest policy with political processes and changing state and national priorities (as during the Second World War) was not just a phenomenon of the affluent '70s but an inevitable result of the increasing prominence of forest management on the public agenda since the 1916 Act.

6.0 RECOMMENDATIONS

Given the necessarily incomplete nature of the field survey of these forest areas, it is recommended that:

- all future management plans for these State Forest areas (hereafter areas) be referred to the Forestry Archaeologist or other appropriate professional for assessment prior to implementation;
- the Forestry Archaeologist or Forest Manager refers to the EIS Historical Report and Archaeological Report in formulating future management plans of the areas;
 - any planned work within the areas which would disturb physical remains identified by theme or model in the history or report as representing European heritage, be referred to an appropriate authority for assessment of site and remains in terms of commonness, relevance to historic theme and contribution to whole, as outlined in Report Section 4.0, prior to any work commencing;
 - sites identified by appropriate experts as significant to the European heritage of the areas, according to the criteria outlined above, be subject to more intensive study and documentation as time and funds permit;
- existing SFNSW material (files, maps, plans, photographs and other) be preserved. That such material be assessed for its potential contribution to the history of these sites and others and the history of forestry generally and that the nature and content of the archive be summarised and broadcast in order that professionals working in history, archaeology, geography and other related disciplines might be made aware of the resource.

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APPENDIX 1

Grafton & Casino/Murwillumbah European Heritage Brief

AIMS

- i. Identify and obtain basic information on all major historic places within the study areas.
- ii. identify statewide, regional and local historical themes which are relevant to an understanding of the cultural values of the study areas.
- iii. obtain basic information on the distribution and patterning of surviving historic resources, reflecting the above themes.
- iv. Assess impacts on the resource from forestry landuse.
- v. Recommend steps to ameliorate impacts.

METHODS GENERAL

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NPWS Director's Requirements

"Historical heritage has an important place in the description of the forest environment. Oral and documentary materials should be assessed in relation to the study area. The material remains of forest industry practice and other rural/industrial enterprise need to be described in the context of a recognised planning methodology.

Assessment of impacts on the European cultural resource should be based on a predictive locational model and prior historical research. The options for limiting impacts should be expressed in terms of the constraints that the significance of the resource places on the Commission, and in terms of protection under NPWS and Heritage Legislation requirements."

The preferred NPWS methodology is based on the use of 'historic themes' to assess the resource and its <u>cultural significance</u>. The historic theme for the study area is development of the forest industry, and the use of forests for pastoral and mining pursuits.

The methodology involves :

i) A <u>Regional overview</u> of the historic resource, both temporal and spatial, to produce a broad history of the study areas, identifying the major historical processes which shaped the landscape and which may have left physical evidence, and outlining the major relevant themes, and further work required.

ii) <u>Thematic Research</u> to establish in detail the chronological and geographical limits of the historic theme, classified according to technological or economic influence.

iii) <u>Archaeological Assessment</u> involving an examination of all available databases and archives on surviving historic resources in the study areas, including such sources as :

- . Register of the National Estate
- . National Trust Begister
- . State Heritage Inventory
- NPWS Historic Place Register
- Local Council LEP heritage study schedules
- · Primary source material from thematic research

iv) Preparation of an <u>'Industrial Profile'</u> - schematic flowcharts of industrial processes outlining transport, distribution, resource extraction and processing, along with associated infrastructural requirements. The end result is a <u>model</u> of the actual processes that took place in the forests, which can be tested against physical and historical evidence of forest use, and be used to direct field surveys.

v) a) <u>Baseline sampling</u> to field investigate known and identified historic places, and record sites on appropriate registers.

b) <u>Opportunistic sampling</u> to test the Industrial Profile model, stratified by land system and industrial process.

Sampling will generate adequate data to feed back into and refine the Industrial Profile model. Sampling will include oral histories.

vi) Predictive model refinement

Creation of predictive model of site locations based on :

- historical overview
- thematic studies
- industry profiles
- site survey data
- oral histories

By this stage it should be possible to describe with a fair degree of conviction, if not absolute confidence, the sorts of different historic places that can be expected, where they will occur, based on a reasonable understanding of the environmental and cultural influences which operated in the past, and their likely density.

The study region will be divided into areas of known and likely occurrence of historic places of different types. It will also be possible to define what particular periods of activity are likely to be represented, what significance they have generally, and what individual sites are known. This will provide an overall statement of where historic resources are likely to be located, and the requirements for their management.

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REPORTING

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Project completion

The draft report will be structured to fulfil the aims of the brief. The goal of the project is to create a database which will allow management decisions to be made with the best possible information on historic resources. Some of this information will remain as data, to be drawn on as required, while some will need to be developed or incorporated into specific mechanisms for long-term management, such as plans of management, policies and procedures, public interpretation and so on.

Recommendations on ongoing monitoring strategies for historic heritage values are to be made, including use of GIS-based systems.

RESOURCES

The anticipated resource allocation for the project are indicated in the table below :

Management Area	Literature Review	Fieldwork	Reporting	Total
Grafton	1 week	1 week	2 weeks	4 weeks
Casino	1 week	1 week	2 weeks	4 weeks
Murwillumbah	1 week	l week	2 weeks	4 weeks
Total	3 weeks	3 weeks	6 weeks	12 weeks

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GAFTON CASINO EUROPEAN HERITAGE BRIEF

MGP NOTES

SCOPE OF WORK

1. Regional overview

A review of existing reports and studies to present a broad picture of the European heritage of the region.

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2. Evolution of Forest Industries

An examination of evolution of forest industries and activities and the associated pastoral grazing and mining landuses within the study area.

3. Historical Sources

An examination of all historical sources to identify the types of activities and the possible surviving historical resources within the area.

4. Archaeology

Undertake consultation and survey to locate, identify and describe historic archaeological sites within the study area.

5. Significant Sites

Assess the significance of sites and identify those under threat from current and proposed activity.

6. Management Options

Review management options available and make recommendation for management of significant sites.

We envisage the major input of:

Kate Blackmore in sections 1, 2 and 3.

Ray Margules in sections 4, 5 and 6.