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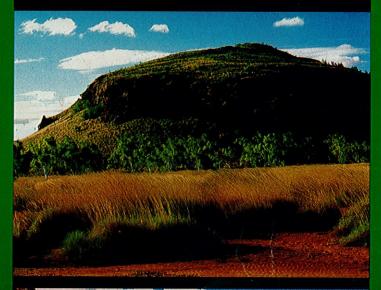
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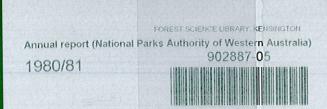
ANNUAL REPORT 1980 — 1981











Cover: RUDALL RIVER NATIONAL PARK (Photos A. Start)

HON. G.E. MASTERS, M.L.C. MINISTER FOR CONSERVATION AND THE ENVIRONMENT

ON BEHALF OF THE NATIONAL PARKS AUTHORITY OF WESTERN AUSTRALIA, I HEREWITH PRESENT THE REPORT FOR THE YEAR 1980-1981.

PROF. A.R. MAIN
PRESIDENT,
NATIONAL PARKS AUTHORITY OF W.A.

CAVE STRAWS — YANCHEP NATIONAL PARK (Photo M. Newton)



COMO RESOURCE CENTRE DEPARTMENT OF CONSERVATION & LAND MANAGEMENT WESTERN AUSTRALIA

NATIONAL PARKS AUTHORITY WESTERN AUSTRALIA

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THE NATIONAL PARKS AUTHORITY

OBJECTIVES AND AIMS

The principal consideration in national parks management is toward the conservation of the land resources—including flora and fauna, and their enhancement, and development in certain areas, to permit public use and enjoyment. Then follows a need for reconciliation between the requirements of people and the aim of conservation of natural qualities.

Public interest is a major aspect in determining patterns of use and where public visitation is high, opportunities must be provided for relaxation and inspiration within the backdrop of an environment, normally set aside for its scenic grandeur or ecological attributes. This is best done through the provision of appropriately sited public facilities which permit access to, and an understanding of that environment.

Accordingly, it is the National Parks Authority's aim to research and survey the landscape and biological components of each national park, and to develop management plans which will define attractions and locate public facilities. These will be developed as priorities and funds permit.

The policies of the Authority, in this regard, have been published — Management Policies 1977 — but in the light of management experience, some may need to be modified from time to time.

THE AUTHORITY

The State Gardens Board was formed on 15 December, 1920 under the Parks and Reserves Act 1895. This Board was replaced in 1956 by the National Parks Board, also under the Parks and Reserves Act, to control and manage National Parks and some other reserves.

The National Parks Authority Act came into operation on 1 August, 1976. With the proclamation of the Act, the National Parks Authority assumed the functions of the National Parks Board. Authority meetings were held monthly and meetings of the Works and Finance Committee were convened as necessary. Membership at 30 June, 1981 was as follows:—

* Prof. A.R. Main Ph. D., F.A.A., C.B.E., President B.M.J. Hussey, B.Sc. (Hons.) (Bot.), Cert. Ed. H.W. Sorensen, A.A.S.A., F.B.S. (Aust.) D.W.G. Treloar, M.Sc. (Agric.)

W.G. Young

The Conservator of Forests, B.J. Beggs, B.Sc. (For.), Dip. For.

The Director of Fisheries and Wildlife, B.K. Bowen, B.Sc.

The Surveyor General, J.F. Morgan, L.S., F.I.S. (Aust.), M.A.I.C.

The Director of the Department of Tourism, N.J. Semmens, F.A.I.M.,

each of whom serve ex officio on the Authority.

DEPUTIES

For the Conservator of Forests — P.J. McNamara, M.A., F.A.I.M.

For the Director of Fisheries and Wildlife — A. Burbidge, B.Sc. (Hons.), Ph.D.

For the Director of the Department of Tourism, L.Y. Hitchen

For the Surveyor General — P. Van Noort, L.S., M.I.S. (Aust.)

C.F.H. Jenkins — President, retired 31 July, 1980 Prof. A.R. Main — President, appointed 1 August, 1980.

ADVISORY COMMITTEES

Following recommendations of the Conservation Through Reserves Committee, Environmental Protection Authority and the Endorsement of the State Cabinet, the following Advisory Committees were active during 1980-81.

LEEUWIN-NATURALISTE NATIONAL PARKS ADVISORY COMMITTEE

National Parks Authority — H.W. Sorensen — Chairman H.R. Gorringe — Secretary

Shire of Augusta-Margaret River — Councillor A.P. Hillier Councillor E.G. Stephensen

Shire of Busselton — Councillor C.A. Guthrie Councillor A.V.C. Miles

Forests Department —
D. Spriggins — Inspector, Forests Department,
Bunbury

Department of Agriculture — J. Grasby — Adviser, Soil Conservation Service

W.A. Wildlife Authority —
R. Aitken — Member of the W.A. Wildlife
Authority

D'ENTRECASTEAUX NATIONAL PARKS ADVISORY COMMITTEE

National Parks Authority — W.G. Young — Chairman H.R. Gorringe — Secretary

Shire of Manjimup —
Councillor C.S. Crombie
G. Gardner

Shire of Nannup — Councillor J.M. McKittrick

Forests Department — F.J. Bradshaw — Senior Divisional Forest Officer

Department of Agriculture —
K. Hawley — Officer in Charge, Agriculture
Department, Manjimup

Department of Lands and Surveys — C.P. Hutchinson — Divisional Surveyor

ESPERANCE NATIONAL PARKS ADVISORY COMMITTEE

National Parks Authority — B.K. Bowen — Chairman H.R. Gorringe — Secretary

Esperance Shire Council — Councillor D.F. March Councillor B.E. Stearne

Esperance Fishermen's Association — J. Cahill

Esperance Wildflower Society — P. Daniell

Department of Lands and Surveys — R.K. Morland — District Surveyor

Department of Agriculture — A. Kubicki — Agriculture Adviser

MANAGEMENT AND PROTECTION

PLANNING

The Authority has a Planning Officer whose duties require assessment of the natural attractions of national parks and the bringing of these to the attention of the public without diminishing their appeal, through appropriate planning. The requirement for ingenuity in management planning has been at a maximum throughout the year as a result of increasing public visitation and the need to provide services.

A number of the State's national parks have been evaluated in management planning exercises, with several development and management initiatives being implemented. Whilst demand for planning services has increased further, the prevailing constraint on resources has prevented the completion of any one major management planning exercise this year. On the other hand, joint work roles as a team effort comprising biological and planning staff, continued to dominate time allocated to field tasks, with numerous issues needing resolution in conjunction with research, fire management, and field staff.

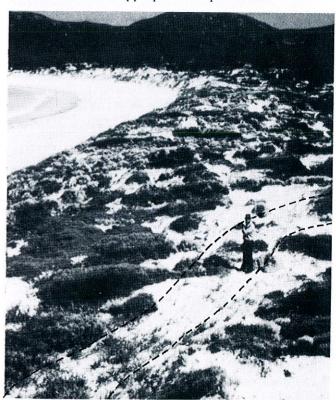
Several mapping tasks were undertaken ranging from preparation of regional park plans to specific site arrangements for various developments.

Field trips ranged from a management planning analysis of parks in the Kimberley and Pilbara, aerial evaluation of fire management protection works in southern parks, resource and management surveys in recently created parks, to coordination of road programmes, maintenance requirements and site design.

Numerous meetings or seminars were attended throughout the year on topics and issues relevant to national parks both in Perth and elsewhere in the State. The South Coast and Leeuwin-Naturaliste Advisory Committees were attended in an advisory capacity, and a paper on management planning implications for a marine park at North West Cape was presented at a Resource Seminar at Exmouth.

MANAGEMENT

The successful management of the State's national parks during 1980/81 has been due to careful deployment of staff, materials and use of available funds. The overall management programme has been one of which was restricted to environmental protection in the form of patrol, litter collection, noxious weed control, fire protection, reestablishment of degraded areas and facility maintenance. In some areas, new access roads were constructed and others maintained at a modest level, whilst most walking tracks, picnic areas and camping grounds received attention to keep them at a standard appropriate for public use.



The Western Australian coastline is extremely fragile and foredune areas require special protection from vegetation damage. Here, damage has been caused by an unidentified vehicle at a remote beach in Cape Arid National Park. When such damage continues unchecked, the necessary dune stabilisation programmes required at a later date can be extremely costly.

Photo: J. Watson

RESEARCH

During the year, research carried out in National Parks fell into three broad categories. Firstly work undertaken by outside organizations, particularly research groups from the two Universities and some other tertiary institutions. Secondly, inter-departmental research projects; and thirdly, projects carried out by National Parks Authority staff.

Applications for research permits reflect rapidly expanding interest in National Parks as centres for research into both physical and biological sciences. Applications to undertake studies have grown steadily over recent years as illustrated in Table 1.

TABLE 1 — Number of research permits issued each calendar year since 1974.

YEAR	FLORA	FAUNA	GEOLOGICAL	ANTHROPOLOGICAL
1974	12	10	0	0
1975	34	1	0	0
1976	23	8	1	0
1977	27	19	0	0
1978	22	10	1	0
1979	13	26	1	0
1980	56	34	11	6

It is apparent from the table that flora and fauna research is increasing steadily whereas geological and anthropological research has been lacking until recent efforts by the National Parks Authority staff to encourage projects.

It is noteworthy that most of the State's national parks enclose areas of impressive landscape, and an understanding of the rock structure and the geological processes which have combined to develop various landforms, is advantageous both for research and for the interest of the visiting public.

RESEARCH BY OUTSIDE ORGANIZATIONS AND TERTIARY INSTITUTIONS:

* Botanical studies including:—

Taxonomy, and biogeography of various trees and plants particularly Acacia, Arthropodium, Beaufortia, Callistemon, Calytrix, Eucalyptus, Thysanotus and Veronica, members of the families Compositae, Fabaceae and Liliaceae and ferns, lichens and conifers.

Relationships between soil calcium and root development

Pollination ecology of kangaroo paw Anigozanthos, Banksia conostylis, Eucalyptus and the Orchidaceae.

Effects of salt and water-saturation on sandplain vegetation.

Pollen ultrastructure and embryology of *Haemodoraceae*.

Morphology of Hakea branching systems.

Preparation of plant lists for John Forrest, Porongurup, Greenmount, Torndirrup and Hamersley Range National Parks.

* Faunal studies including:-

Fauna inventory surveys for taxonomic, distributional and ecological data in numerous National Parks.

Biology and distribution projects on Rufous Bristlebird, Silvereyes, Green Sea Turtles, the frog *Geocrinia* lutea, the decapod crustacea Cherax spp, freshwater fishes, terrestrial and freshwater molluscs, litter fauna and several insect groups.

Taxonomy of bats.

A study on bird population dynamics at Yanchep.

Management studies including:

Environmental effects of horse trails on natural bushland.

Effects of farmland on adjacent undisturbed vegetation and fauna.

In addition to the above there have been several permits for studies in association with the XIII International Botanical Congress, several for examination of flora and fauna in connection with school and university teaching programmes, and three for collection of plant material for identification in conjunction with still and movie photography.

INTERDEPARTMENTAL RESEARCH

Co-operative research involving other government departments is currently limited to an ongoing survey of Systems II (Goldfields). The participants are the Department of Fisheries and Wildlife, the Western Australian Museum and the National Parks Authority.



Rangers Mike Kosorotov and Frank Ainsworth and ecologist Barry Muir handling a Python (Morelia spilotes) in Peak Charles National Park, part of the System II survey.

The National Parks Authority contribution includes biological surveys of Frank Hann, Peak Charles and Boorabbin National Parks. Additionally, the National Parks Authority contributes \$5000 per year towards the salary of a botanist undertaking the vegetation surveys. The research programme is drawing to a close with only two short term field surveys remaining to be completed by National Parks Authority staff, before data collection can be finalised.

With the co-operation of Mr. Peter Rutherford of the Department of Agriculture a study is being carried out on the effects of various herbicides on introduced weeds and native species occurring along some firelines. The intention is to develop a cheap and effective means of controlling growth along fire breaks.

RESEARCH BY STAFF

Currently two projects are being actively pursued. One is to document the distribution and characteristics of habitat suitable for the existence of the Rufous Bristle-bird. The other is to record the structure, floristics and other information from areas of vegetation which have not experienced fire for long periods.

Other investigations have been mounted to investigate special management problems in several parks. These include alteration of the hydrological regime in Yalgorup and Watheroo National Parks, protection of fire sensitive rare plant species in 14 parks, monitoring and control of dieback *Phytophthora cinnamomi* in the south west of the State, feral animal and weed control and kangaroo management (Yalgorup).

A resource inventory to provide the basis for a management plan for the newly vested D'Entrecasteaux National Park was prepared.



The Avon Descent Race where staff have done research and environmental monitoring regarding effects of boat wash and fuel spillage.

Photo: B. Muir

FIRE MANAGEMENT

The year 1980/81 was successful in that it saw the virtual completion of a works programme for fire suppression developed over the past five years. Rangers have had the opportunity to burn-in buffer systems which proved effective during a recent large-fire situation. Hopefully, the progression will continue and greater fire security will be offered both to national parks and for adjoining property owners.

This year there was an increased area damaged due to naturally caused wildfires. The greatest area burnt was in the Hamersley Range National Park where lightning triggered the blaze. This is to be expected and is acceptable in northern regions where many areas are inaccessible and where fire prevention measures are minimal.

Discussion with the Cranbrook Shire during the year resulted in a new major fireline and additional future works in the Stirling Range National Park. The programme will benefit both the Park and adjoining landholders. Additionally, because of the botanical importance of this park, the Fire Management Plan, in part, needs to remain flexible so that it can be modified in the light of new scientific understanding of the flora.

REPORTED WILDFIRES ON EXISTING NATIONAL PARKS AUTHORITY LAND FOR 1980/1981 FIRE SEASON

	FOR 1960/1961 TIRE 52115		APPROX. AREA
PARK	CAUSE	NO. OF FIRES	BURNT (HECTARE)
		TIKES	120
Alexander Morrison	Escape from control burn on N.P.A. land	I	
	Lightning strike	1	200
Cape Arid	Escape from control burn on N.P.A. land	1	25
Fitzgerald	Escape from control burn on adjoining property	1	1500
Geikie Gorge		2	2.2
Gooseberry Hill	Unknown		
Hamersley Range	8 lightning strikes, 2 lightning strikes on adjoining	12	122895
	property; 2 fires lit by prospectors	12	0.1
John Forrest	Deliberate	1	0.1
Kalamunda	1 escape from fire on adjoining property, 1 deliberate	2	4.25
Kalamanda	1 trail bike	3	
Kalbarri	1 lightning 1 escape from fire on adjoining property	2	12990
	1 escape from control burn on adjoining property,		
Leeuwin-Naturaliste	1 escape from fire on adjoining property, 1 cigarette	3	1690
		1	283
Nambung	Deliberate	1	0.1
Neerabup	Deliberate N. P. A. land	1	500
Porongurup	Escape from control burn on N.P.A. land	1	129
Scott	Deliberate	1	
Stirling	1 escape from control burn on N.P.A. land,	2	3150
5	1 fire from adjoining property	2	688
Torndirrup	Deliberately lit on adjoining property	ı	745.2
Walpole-Nornalup	3 deliberate, 2 unknown	5	
	1 campfire, 1 picnickers	2	6.5
Walyunga	Fire from adjoining property	1	4
William Bay	2 escapes from control burns on N.P.A. land	2	331
Yalgorup	Z escapes from control barns on the management	3	.7
Yanchep	2 lit by children, 1 unknown	$\frac{3}{47}$	145264.05
		4 7	

Of the above 47 fire occurrences, 6 were escapes from control burns on N.P.A. land, 10 lightning strikes on N.P.A. land, 10 escapes from adjoining property (2 lightning), 5 unknown, 12 deliberate, 1 trail bike, 1 cigarette, 1 campfire, 1 picnicker.



Results of a deliberately lit wildfire at Cowaramup in the Leeuwin-Naturaliste National Park. Photo: R. Anderson

Fifty-four national parks and major reserves have been treated for fire control. These include:—

- * twenty four areas where buffer and internal firebreak systems have been installed.
- * twelve have perimeter and internal firebreaks constructed.
- * thirteen have no firelines but have minor work mostly to do with reducing fuel levels. These parks are all unmanned and remote.
- * three other remote but manned areas, where minor work has been undertaken, but where effective fire management programmes (with our knowledge to date) are impractical.
- * of two new vestings during the year, one has had some perimeter work, the other is yet untouched.
- * three parks are part of joint plans or interagency agreements between government departments.
- * at least six areas are currently being incorporated into Regional Fire Management Planning.

During the year, contractors were employed on fire line construction within twenty-two parks. New work was carried out in nineteen parks with follow-up maintenance in twenty-one. Ranger staff carried out maintenance work in



Scott River National Park, unauthorised fire out of control. Photo: R. Anderson

the remainder with the Authority's own equipment. This financial year, as and where required, equipment has been upgraded, replaced and new additional units purchased. Many Rangers are now paid-up members of Bush Fire Brigades and have been appointed as Brigade Officers, Fire Control Officers and members of Advisory Committees. With the increased use of available back-up equipment and manpower from other parks, National Parks Authority Rangers are considered an effective firefighting force both in and out of their respective national parks. Notably, National Parks manpower and equipment have been used extensively on neighbouring properties during firefighting operations.

To conform with the regulations of the Health Act, fire hose-reels and extinguishers were installed at Walpole-Nornalup and Pemberton caravan parks during the year. The plans for these installations were also lodged with the Western Australian Fire Brigades Board.

As a result of figures collated over a four-year period, a paper "Fire Causes in Western Australian National Parks" by R.A. Anderson and B.G. Muir was published in May 1981, in the AUSTRALIAN PARKS AND RECREATION Journal.

Many government departments have given valuable assistance but special mention must be made of the Forests Department and Bush Fires Board. Additionally Mr. Peter Rutherford of the Department of Agriculture deserves mention for his active research and encouragement. Most notable are those neighbours and Bush Fire Brigade members who gave freely during control burning operations and wildfires, also the four Honorary Rangers who have personally and unassisted controlled the Haddleton Flora Reserve.

VISITOR SAFETY

Where possible, Rangers and Regional Superintendents, constantly remind and indicate to Park visitors the hazards involved in hiking in rugged and precipitous areas without knowledgeable experience of bush walking in such terrain. Popular parks of concern are the Stirling Range and Hamersley Range National Parks.

In the Hamersley Range National Park where the gorges are a major attraction, the Wittenoom cliff rescue group, equipped largely by the National Parks Authority and made up of the resident ranger and local volunteers, continues to practice regularly. A four-day exercise conducted by the Special Air Services Regiment provided a refresher course and taught the team new techniques. In addition, safety features such as hand rails and steps on steep slopes into some gorges have been extended.

VISITOR DEMAND

Visitor use of the state's national parks varies considerably from region to region. The geographical and climatic difference in national parks and reserves spread throughout the state determines that there is a tourist season at all times during the year.

There has been an upsurge of visitor activity in all parks within the south-west due primarily to the dry winter of 1980 and the long autumn of 1981. Many vehicle tracks which would normally be impassable for all but a few months have remained open for most of the year. This activity has placed a maintenance burden on many rangers, especially those in the larger coastal parks.

In the Esperance district increasing numbers of visitors have been recorded at the remote Cape Arid National Park and also at Stokes National Park — since the establishment of a resident ranger there in July. This ranger also manages Peak Charles National Park, which is located approximately 100 km to the north.

The popular national parks and reserves of the central region between, and including Kalbarri and Yalgorup National Parks, continue to receive visitor pressure.

Residents and visitors of Perth, Fremantle and the metropolitan area tend to visit Yanchep, John Forrest, Walyunga, Serpentine, Kalbarri and Nambung National Parks. It is expected that the relatively new Avon Valley National Park, because of its pleasant bush environment close to Perth, and being open to discreet camping, will become favoured in the future.



Walyunga National Park under the annual deluge of spectators and competitors during the Avon Descent Race.

Photo: G. Quin

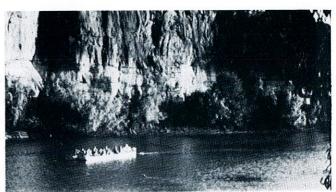
Visitor use of the northern national parks varies in nature and seasonal intensity from one national park to another. National parks such as Windjana Gorge, Geikie Gorge and Hamersley Range receive heavy usage during the winter months, most visitors being on touring holidays. The increase in coaches is particularly evident. Cape Range National Park is frequented by local people for short periods throughout the year and by visitors on touring holidays during winter months.

Increases in visitation were reported in remote areas such as Wolf Creek Crater and Rudall River National Parks and particularly in Windjana Gorge and Tunnel Creek National Parks during 1981. In the latter two National Parks, pressure has far outstripped the facilities and staffing available.

RADIO NETWORK

Radios are installed in all ranger vehicles. Active maintenance through the year ensured continuity in communication with head office or Yanchep bases.

Additionally, head office facilities were upgraded, several older type mobile stations were replaced by more modern and powerful equipment and additional sets were purchased for compatibility with the Forest Department and Local Fire Brigade networks. Permission was given to several local authorities to fit a National Parks Authority frequency crystal to their major sets for improved communications.



Tour boat in Geikie Gorge National Park. Photo: Department of Tourism

PROMOTION

One of the Authority's aims is to promote public awareness, interest and appreciation of the state's national parks and reserves and of the environment generally.

AWARENESS

Head office staff, Rangers and Regional Superintendents have been responsible within their respective areas for promoting public awareness through a variety of information and education services.

Time was spent during the year by all members of the staff advising other government departments and institutions of the Policies and Regulations pertaining to national parks.

Stemming from the 1979 Avon Descent when considerable damage was done in some places through a lack of environmental responsibility, an article was prepared for the organiser's participants booklet. Additionally, various discussions were held with the organisers prior to the July 1980 event.

With regard to visiting student groups, an article was written for the Education Department School Teachers Magazine, advising correct procedures for obtaining ranger services to lecture school groups.

Many written and verbal directions and approvals were supplied to business houses, social and student groups requiring the use of national parks for events or venues.

Rangers and head office staff made arrangements during the year to guide and cater for film crews making various documentaries on tourism and natural history.

The book "The National Parks of Western Australia" was published during the year and a function was held to launch and promote it.

With the approval of the Council of Nature Conservation Ministers (CONCOM) the National Ranger Bulletin was established with the cost being borne by the Federal National Parks and Wildlife Service. This provided an Australia-wide medium of awareness between all State and Commonwealth departments and staff involved in national parks and wildlife management.

ENVIRONMENTAL EDUCATION

Talks and lectures requested by private bodies and schools were met where possible during the year. One programme

which was highly successful was a course on National Parks presented by the Regional Superintendent at the 1981 Albany Summer School. Also over fifteen illustrated talks were given in the South-West region. A co-ordinating role was assumed by the Authority in the establishment of a voluntary conservation corps programme in which various voluntary organizations, including schools, have undertaken special projects within national parks and other conservation reserves of the Great Southern Region.

Besides addresses given by Authority staff to service bodies and social clubs, a number of promotional exercises have been carried out, including open national parks night in Port Hedland and Tom Price. The resident Ranger in Hamersley Range National Park frequently holds slide shows and answers questions for campers, while the resident Ranger at Cape Range National Park addresses all incoming United States service personnel on national parks during their induction course to the Harold E. Holt Naval Communications Centre.

MEDIA AND GENERAL LIAISON

Liaison with the public and various groups wishing to visit and camp in national parks increased during the year.

Student and teacher requests for information continued to increase and tourist agencies throughout the State sought supply of Authority publications. These were met where possible.

PUBLICATIONS

General update and reprinting of standing National Parks Authority information and policy documents was carried out when necessary. Several new publications were added to the list of some 20 current productions already available. The new releases were:

THE NATIONAL PARKS OF WESTERN AUSTRALIA by C.F.H. Jenkins. A book published by the National Parks Authority, 1980. A book on the history and status of National Parks of Western Australia with reference to other State's National Parks.

"HILL SPRINGS" CAPE ARID NATIONAL PARK, A brochure on the historic ruins of Hill Springs Station.

NAMBUNG NATIONAL PARK. A brochure depicting facilities, contents and general information relating to this National Park.

WALYUNGA NATIONAL PARK WALK TRAILS. A booklet describing two nature trails featured in the National Park.

FOR KIDS IN PARKS. An illustrated and educational booklet specifically to entertain children and inform them of the State's National Parks and their contents.

KALBARRI NATIONAL PARK'S BANKSIAS. An identification and information sheet.

STIRLING RANGE NATIONAL PARK BANKSIAS. An identification and information sheet.

STIRLING RANGE NATIONAL PARK — ORCHIDS. An identification and information sheet.

STIRLING RANGE NATIONAL PARK — CHECKLIST OF BIRDS. Booklet, a description and identification publication.

CAPE LE GRAND — CHECKLIST OF BIRDS. Information sheet.

FITZGERALD RIVER NATIONAL PARK — CHECKLIST OF BIRDS. Information leaflet.

CAPE LE GRAND NATIONAL PARK — CHECKLIST OF MAMMALS. Information leaflet.

CAPE LE GRAND NATIONAL PARK — AMPHIBIANS AND FISH. Information leaflet.



Some New Publications

PUBLICATIONS CURRENTLY IN PRINT

CAPE ARID NATIONAL PARK -- LEN OTTE NATURE TRAIL

WALPOLE-NORNALUP NATIONAL PARK — SALMON FISHING

YANCHEP NATIONAL PARK. A booklet on the history, wildlife and natural features of the Park.

YANCHEP NATIONAL PARK. Amphibian and reptiles information booklet. Checklists for mammals and plants.

REPORTS FEATURED IN OTHER PUBLICATIONS FIRE CAUSES IN WESTERN AUSTRALIAN NATIONAL PARKS by R.A. Anderson and B.G. Muir. DISPLAYS

During the year a display on "THE NATIONAL PARKS OF WESTERN AUSTRALIA" was constructed on a new display board system and loaned on request to the Caravan and Allied Industries Association Fair at the Royal Agricultural Showgrounds.

A similar static display featuring the newly released book "THE NATIONAL PARKS OF WESTERN AUSTRALIA" was constructed for the launching ceremony of the book by the Premier of Western Australia Sir Charles Court on 6th August, 1980.

VISITOR FACILITIES

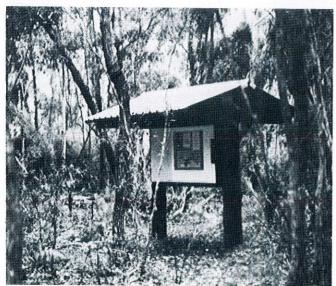




1980

A major effort continued to be made towards improving beach access for the elderly and at the same time helping to protect fragile foredunes. At Injidup, south of Yallingup in the Leeuwin-Naturaliste National Park, a walkway has been provided from the car park to the beach.

Throughout the State's National Parks, the Authority has continued to maintain, enlarge and provide new visitor facilities.



The walker registration post on the main footpath into the Nuyts Wilderness at Walpole-Nornalup National Park provides walkers with an opportunity to indicate their proposed objectives in the area and also to add valuable comments when returning. The registration post was modelled along similar lines to those in use on the Cradle Mountain — Lake St. Clair Overland Trail in Tasmania.

In the Albany district, the popular 'Tree in the Rock' picnic area at Porongurup National Park has been redesigned to improve visitor safety and to act as a starting point for several walks. At Torndirrup National Park a footpath to Bald Head was established with the assistance of local volunteers, including school children.

Note recovery of vegetation

A major effort continued to be made towards improving beach access for the elderly and at the same time helping to protect fragile foredunes. At Injidup, south of Yallingup in the Leeuwin-Naturaliste National Park, a walkway has been provided from the car park to the beach, similar walkways have been provided in several national parks of the south coast.

There has been a noticeable increase in both bushwalking and casual walks by general visitors. Where possible, new footpaths and simple trail markers have been provided. A walker registration post on the main footpath into the Nuyts Wilderness at Walpole-Nornalup National Park has provided walkers with an opportunity to indicate their proposed objectives in the area and also to add valuable comments when returning. The registration post was modelled along similar lines to those in use on the Cradle Mountain — Lake St. Clair Overland Trail in Tasmania.

At Walpole, a small booking-in office has been established at the popular Coalmine Beach Caravan Park. In the Beedelup Block of the Pemberton National Park, new steps and footpath improvements have been made at Beedelup Falls.

A toilet complex was renovated and special facilities for handicapped people were installed at Yanchep National Park.

At Yalgorup National Park extensive work was done on new walk trails and parking areas. A described walk trail was installed in Walyunga National Park during the year, but unfortunately, after several months, the trail was vandalised and many marker pegs removed. Despite constant maintenance, the trail still suffers interference.

In Serpentine National Park, a landslip over the path to the falls required the design and construction of a new path and elevated decking. Rehabilitation of the original path resulted in an aesthetic approach and easier walk to the spectacular waterfall and natural pool.

Extensions to parking areas were undertaken and completed in John Forrest National Park during the year, along with the improvement and landscaping of the existing picnic areas.

Throughout the serviced National Parks of the north, Rangers have been engaged on a continuing programme of improvement and extension to visitor facilities. They include improved toilet facilities, camping areas, sign boarding, provision of walking trails and safety features such as steps down precipitous slopes.

The highest expenditure on improvements to northern national parks was at Geikie Gorge where increasing tourism had outstripped the capacity of the modest ablution facilities and the carrying capacity of the tour boats. A transportable ablution block was installed and three larger capacity tour boats were designed and manufactured.

Projects of this type are on-going and most proposals for the coming year will be extensions of such labour intensive, low cost projects. However more costly developments are urgently needed in some areas. In particular, facilities at Windjana Gorge are totally inadequate for the high level of visitation being experienced at present. The first requirement is for a safe water supply.

Of concern to the Authority is the increasing demand by tourists for better facilities in the way of improved access roads, camping grounds and visitor information centres, which the Authority cannot meet from its limited budget for capital improvements.

In response to a call for a visitor information centre for Kalbarri which would house a full display of the area's attractions, and description of the national park's geology, flora and fauna, a costing of centres in other State's was made. Simple show rooms elsewhere cost up to \$20,000 with most centres averaging about \$70,000. In some States, complexes in National Parks designed for educational purposes have cost up to \$1 million.

For Western Australia, such structures cannot be contemplated because at this stage our resources are mostly invested in the land with up to 6% of the State reserved for conservation purposes. Nevertheless progress toward adequate visitor information centres must be made in due course.

CO-OPERATION AND COMMITTEE INVOLVEMENTS

Numerous meetings or seminars were attended by Authority staff on wide ranging topics and issues relating to National Parks and environmental matters.

The National Parks Authority is represented on the Agriculture Protection Board's Manjimup and Busselton Regional Advisory Groups, as well as the Board's Blackberry Control Committee and Feral Cat Committee. It is also represented on the joint Museum, University of Western Australia, Department of Fisheries and Wildlife and National Parks Authority Biological Survey Committee, and South-Coast Working Groups, Cave Management Working Group and the Apiary Sites Committee.

Co-operative studies into identification, distribution and control of dieback are ongoing with the C.S.I.R.O. Division of Forest Research and the Forests Department.

The Esperance and Leeuwin-Naturaliste National Parks Advisory Committees were attended during the year. Representation was also made on the South Coast Reserves Working Group in Albany, Denmark and Gnowangerup Shires and the Cave Management Group convened by the Department of Conservation and Environment.

The Marine Park Working Group convened by the National Parks Authority continued towards finalisation of proposals for a marine park at North West Cape. The Director and the Planning Officer attended a symposium on natural resources at Exmouth during March. The Shire is keen to develop tourist interest and facilities within that area and already it sees the natural attractions as a drawcard. These include Cape Range National Park and the Ningaloo Reef and off-shore islands with good fishing farther north. Various aspects of tourist developments based on a full understanding of the natural resources of the area were discussed at the seminar. A paper on management planning implications for the park was presented by the Planning Officer.

Representation was made on the Bush Fires Board and also M.R.P.A. Northern Corridor-Freeway Proposals Committee in which Government Departments present necessary criteria for future road planning in the northern areas between Wanneroo and Guilderton townsites.

The Council of Nature Conservation Ministers and their advisers met in the National Parks Authority headquarters building at Matilda Bay during July 1980. The preceding day was utilized by the meeting of Standing Committee to CONCOM. The Director attended a further CONCOM meeting held in Melbourne during May 1981.

As a member and the State representative on the Garden Island Environmental Advisory Committee, the Director attended meetings every three months to discuss environmental management and public access to Garden Island. Representation was also made with regard to natural environmental interests on the Western Australian Heritage Committee.

The Director and members of the staff met the Legislative Council Select Committee on national parks on one occasion during the year, and the Committee was further assisted in its inquiries by the Northern and Southern Regional Superintendents (at Karratha and Albany) and various rangers during field investigations.

A Fire Ecology Workshop at Mildura, Victoria, during May 1981 was sponsored by CONCOM with the aim of bringing together specialists on fire ecology and management for the purpose of producing a series of recommendations suitable for application throughout semi-arid Australia. An Authority staff member attended the workshop, following which an analysis involving fire management records, ecological effects, management planning methodology and research and monitoring procedures has been compiled.

HISTORY OF PARKS

YANCHEP

Yanchep National Park is situated in the northern regions of

the Swan Coastal Plain. The thickly wooded areas of limestone formations and sand dune associations is enhanced by the low land lake systems and concentration of underground caves.

For centuries before European settlement, aborigines extensively used the wooded wetlands to hunt, camp and meet for periodical corroborees. The huge Tuart trees and limestone caverns provided excellent shelter and protection.

The name Yanchep is derived from the native name Yanget, applied to bulrush *Typha orientalis* which grows prolifically in many south-west swamps and is abundant in the lakes of the district.

The area was first visited by Europeans in 1834 when John Butler searched for stray cattle 53 km north of Perth and recorded the lakes and an abundance of game. Then four years later, Lt. George Grey explored the area and reported the existence of some "remarkable" caves.

In the period 1899-1902, the first actual settler Henry White built and took up residence in a cottage opposite Lake Yonderup, adjacent to the south end of Lake Yanchep. Just



Cave tourists of the "Thirties".

prior to and during 1903, most of the major caves in the area were explored, named and recorded and Henry White was made honorary caretaker guide.

With the realization that the area was quite attractive, the government saw fit to reserve 5640 acres (2283 ha) of the district which enclosed the lake and flats approximately 8 km long, for the "Protection and Preservation of Caves and Flora and for a Health and Recreation Pleasure Resort". The reserve number 9868 was vested in the Caves Board on 25th August, 1905.

During the succeeding years that the Caves Board functioned, efforts were made to develop Yanchep but owing to distances and sand track conditions, it was without success. The Board was dissolved in 1910 and the newly formed Immigration, Tourist and General Information Department took over.

In 1912, there was yet another change, in that the State Hotels Department was formed and it absorbed the Tourist Section of the Immigration and General Information Department. The State Hotels Department continued to manage Yanchep under serious disadvantages until 1931

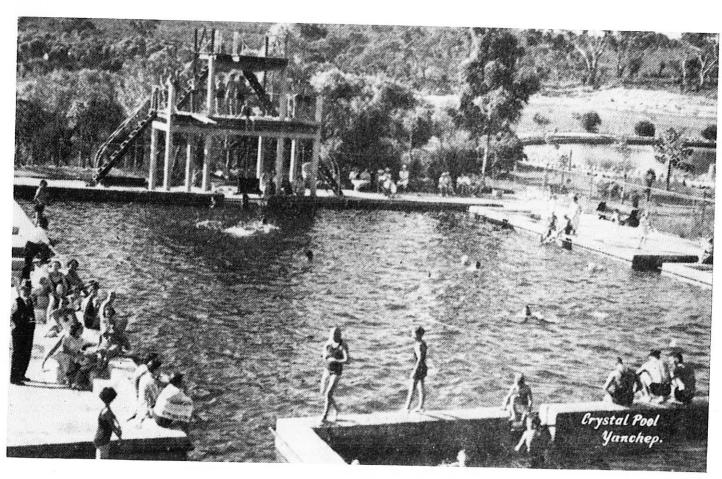
when the State Gardens Board with Mr. L.E. Shapcott as Chairman, assumed control.

During 1930, philanthropist Sir Charles McNess made a grant of £11,600 for the alleviation of distress and this act of benevolence, along with the good management of the State Gardens Board, saw the commencement of major developments in the Reserve. Later on, Sir Charles was to make further grants to the State and Yanchep continued to benefit.

Among works undertaken in 1931 were:—

- * the sealed road extended from Wanneroo
- * a contour survey of the Reserve completed
- * a single wire telephone connected
- * reclamation and ramping of the Lake foreshore
- * power and water supplies reticulated
- * Crystal Cave fitted with electric lights
- * children's playground set up near Caves House
- * locations 626 and 422 resumed for inclusion in the Reserve.

On December 20, 1931, a Grand Opening of the Reserve was held and Yanchep commenced to become the well known



Crystal Pool.

and used recreation park that Western Australians now know.

During the depression years of the 'thirties', sustenance workers were employed on road construction, the dredging of Lake Yanchep and the erection of various residential facilities. McNess Hostel (incorporating the original Caves House), the swimming pool and a number of roads were completed in 1932.

The works continued and in 1933, the Lodge (in the following year to be renamed Gloucester Lodge after a visit by the Duke of Gloucester) was built. Further accommodation in the reserve was provided with the placement of eight tramway units as cottages near Boomerang Gorge. These were also used as accommodation for sustenance workers.

In 1935, Lake Yanchep was renamed as "Loch McNess" in honour of Sir Charles McNess's contribution to the Reserve's development. A further highlight of that year was the inauguration of a bus service to Yanchep from Perth.

The famed Yanchep Inn, a hotel having English style character and sumptuous accommodation, was completed in 1936 for a total cost of £15,828.1.11 and further

development continued with the joining by tunnel of the Bebo Moro and Mambibby caves.



Yanchep Inn.

Although koalas became extinct in Western Australia long before the coming of the white man, a colony of eastern state's animals were first introduced to Yanchep in 1938 wherein they became a major attraction to all Yanchep visitors. The reserve recorded its 100,000th visitor to the



A stroll down to Loch McNess.

caves during the same year and excavation in Yonderup Cave unearthed a human skull and assorted animal bones.

World War II (1942) saw the need for armed services occupation in the Reserve and the R.A.A.F. took over the Yanchep Inn and the Gloucester Lodge. The Army also established facilities. For the duration of the War, Yanchep was run by a Superintendent, a mechanic and a groundsman. After the War, and following the withdrawal of servicemen, eight extra staff were taken on, some of these being housed in the tram bungalows.

A new colony of koalas was re-established at Yanchep in 1948, (the previous group having perished prior to 1940) and immediately became a major attraction at the reserve once again.

In 1949, recognition was given to Sir George Grey's first recording of the Yanchep Caves by the dedication of a plaque in the reserve near Crystal Caves. The Reserve was also provided with a new facility that year; the launch "ELEANOR" in which thousands of visitors over the next thirteen years enjoyed scenic trips around the beautiful Loch McNess.

On April 13th, 1956, the State Gardens Board became the National Parks Board and this resulted in the strengthening of the conservation policy and a general review of all management procedures. The following year construction of six staff houses, a machinery shed, change rooms and a plant nursery was necessary in Yanchep to keep abreast of the visitor and maintenance requirements of the ever popular reserve.

Four years passed with the popularity of Yanchep's environment and facilities catering to many of Perth's families and overseas visitors. A nine-hole golf course was constructed and opened in 1961, with the commissioning of a new launch the "Miss Yanchep" in the following year.

The year 1969 was rather an important one for Yanchep in that it was finally given full status and proclaimed a national park. This year also saw the reconstruction of a new swimming pool inside the original pool's structure.

The late sixties and early seventies, whilst not realizing many new facilities, saw Yanchep National park become the training centre for many new Rangers who were employed to cope with the Board's acquisition (in that period) of additional new Parks and Reserves throughout the State.

In 1976, administrative changes were again instigated and the National Parks Board became as it is today, the National Parks Authority. In the same year, from government grants, came the construction of a modern walk-through enclosure for the koalas. Rewiring and lighting of the Crystal and Yonderup Caves offset the unfortunate closure of Gloucester Lodge for health and structural reasons. The magnificent Lodge building was not lost however, and after extensive renovations, and the collection of district artifacts, the Wanneroo Shire took over the building and opened the Gloucester Lodge Museum.



Gloucester Lodge in the early days.

Now in 1981 Yanchep National Park is the most patronised of all Western Australia's National Parks. Local, interstate and overseas visitors nearly always make a point of visiting the Park to see the only koala colony in the State, experience the magnificent wildflowers in season, and tour the ancient limestone caves.

NATIONAL PARKS AND RESERVES DESCRIPTION

STATISTICS

As at the 30th June, 1981, the total of reserves vested in or under the control and management of the National Parks Authority was:—

NATIONAL PARKS RESERVES TOTAL AREA 50 13 4,363,968 ha

AMENDMENTS TO NATIONAL PARKS

The following additions and amendments to National Parks occurred during the year:—

CAPE ARID NATIONAL PARK — the area of Class A Reserve 24047 was increased by 25,655 ha (Government Gazette 26.9.80 p. 3318).

D'ENTRECASTEAUX NATIONAL PARK — Class A Reserves 28478, 28479, 26628 and 36996 were named D'Entrecasteaux National park (Government Gazette 28.11.80 p. 4037).

D'Entrecasteaux National Park increased by the addition of Location numbers 5472, 6950, 6951, 6962, part of 6963, 6964

to 6968 inclusive, 6955, 7640, 7645, 7646, 7649, 7658 to 7662 inclusive, 7669 to 7676 inclusive. 7678, 7679, part 7680, 7861 to 7683 inclusive, 9277, 1100, 12731, 12887, 12891, 12896, 12901, 12902 and unnumbered Crown Land as shown on Lands and Surveys Reserve Plans 183, Sheets 1 and 2, all combining to contain 34,894 hectares.

HAMERSLEY RANGE NATIONAL PARK—the area of Class A Reserve 30082 was corrected to 617,606 ha (Government Gazette 4.7.80 p. 2124).

KALBARRI NATIONAL PARK — Class C Reserve 32442 "Workshop Site" containing 0.15 ha cancelled (Government Gazette 10.10.80 p. 3466).

NAMBUNG NATIONAL PARK — Melbourne Location 3931 included in Reserve C.28393 (Government Gazette 15.8.80 p. 2834).

NATIONAL PARKS AND RESERVES VESTED IN OR UNDER THE CONTROL AND MANAGEMENT OF THE AUTHORITY AS AT 30 JUNE, 1981

NATIONAL PARKS

ALEXANDER MORRISON NATIONAL PARK — Class A Reserve of 8501 hectares comprising Reserves A.29800, A.29803 and A.29804 located north-west of Jurien Bay and controlled by the Ranger in charge of Nambung National Park. A representation of plant and wildflower habitat in the northern sandplain.

AVON VALLEY NATIONAL PARK — An A Class Reserve of 4377 hectares having a resident Ranger in charge and being a limited access Park. It is an area of magnificent scenery in the river valleys of the Darling Scarp and is an excellent representative area of the transition zone between the forest block and wheat belt country.

BADGINGARRA NATIONAL PARK — Situated northeast of the Cervantes townsite and Nambung National Park, this area of 13 121 hectares was reserved mainly for the preservation of Black Kangaroo Paws. It is also known to contain many other rare and restricted plant species.

BOORABBIN NATIONAL PARK — An A Class Reserve of 26 000 hectares situated on each side of the Great Eastern Highway, west of Boorabbin. Typical shrubland of the sand plains east of the wheatbelt.

CAPE ARID NATIONAL PARK — An A Class Reserve of 279 415 hectares having magnificent coastal scenery, popular for camping and fishing. A Ranger is resident in the park near the mouth of the Thomas River.

CAPE LE GRAND NATIONAL PARK — An A Class Reserve consisting of 31 390 hectares on the South Coast about 32 kilometres east of Esperance. It has magnificent coastal scenery with granite peaks and swamps rich in birdlife. The area is popular for summer camping and fishing holidays. The Ranger is resident in the park.

CAPE RANGE NATIONAL PARK — The park was extended to include a part of former Yardie Creek Station and was classified A Class Reserve in 1974. The park consists of 50 581 hectares situated on the North West Coast near Exmouth. It contains rugged mountain scenery with deeply eroded gorges and a coastline well patronised for camping and fishing during the winter months. The park is controlled by a Ranger located in Exmouth.



Cape Range National Park.

CHICHESTER RANGE NATIONAL PARK — This A Class Reserve comprises 150 609 hectares of great scenic beauty including the well known Python Pool. The area is located south of Roebourne and is serviced by a Ranger appointed to control the Hamersley Range National Park and by a mobile Ranger based at Millstream during the winter months. This park has panoramic views of Pilbara landscape.

COLLIER RANGE NATIONAL PARK — This Class C Reserve of 277 841 hectares consists of high ground between the upper reaches of the Ashburton and Gascoyne Rivers. The park contains large areas of ungrazed spinifex and soft grass country.

D'ENTRECASTEAUX NATIONAL PARK — A series of irregular A Class reserves totalling 36 599 hectares. A complex area of wetlands, forests and coastal dunes rich in plant species and containing many unusual habitats. The Park is situated between Black Point and Marlinup on the south coast of the state.

DROVERS CAVE NATIONAL PARK — An A Class Reserve of 2 681 hectares located north of Jurien Bay, this area is under the supervision of the Ranger in charge of Nambung National Park, situated in coastal sand plain area where wildflowers and karst feature.

DRYSDALE RIVER NATIONAL PARK — This Reserve consists of 435 591 hectares of wooded country in the North Kimberley. The Drysdale River flows through the middle of the reserve which includes the Ashton Range and the Carson escarpment. A large isolated wilderness area requiring National Parks Authority permission to enter.



Looking over Twin Bays to Thumb Peak on the left, Fitzgerald River National Park.

Photo: George Duxbury

EUCLA NATIONAL PARK — An A Class Reserve of 3 342 hectares situated on the south coast at the Western Australia/South Australian border. An arid to semi-arid area of sand hills and mallee country with coastal limestone cliffs.

FITZGERALD RIVER NATIONAL PARK — A major Reserve of 242 739 hectares, situated on the South Coast between the Gairdner, Fitzgerald and Phillips River, west of Culham Inlet and Hopetoun townsite. Its most interesting features are the Fitzgerald and Hamersley River Gorges and spectacular cream coloured spongolite cliffs. It contains magnificent coastal and mountain scenery and unique flora and fauna. The area is serviced by a Ranger based at Jerramungup and an assistant Ranger resident at Quaalup and one at East Mt. Barren.

FRANK HANN NATIONAL PARK — This is an area of 49 877 hectares, the majority of this comprises land 1.5 km wide on each side of the Lake King — Norseman Road. The park represents a cross section of the heath flora of the inland sand plain east of the wheatbelt.

GEIKIE GORGE NATIONAL PARK — This area of 3 136 hectares about 16 km from Fitzroy Crossing contains a beautiful gorge where the river cuts through an ancient limestone barrier reef. A campsite and river trips are operated by a Ranger during the dry season.

GOONGARRIE NATIONAL PARK — An A Class Reserve of 49 878 hectares representing Mulga Country near to the Eucalypt Mulga line. This is the only National Park containing a large area of Mulga dominated vegetation at the southern end of the range of that species.

GOOSEBERRY HILL NATIONAL PARK — A scenic lookout of 33 hectares located on the western edge of the Darling Range escarpment a few kilometres from Kalamunda.

GREENMOUNT NATIONAL PARK — An area of 56 hectares reserved for its panoramic views of the coastal plain, Swan River and Perth City and its suburbs. Contains a fine representation of Jarrah trees.

HAMERSLEY RANGE NATIONAL PARK — This is the second largest single National Park under the Authority's control and comprises an area of 617 606 hectares. The area is one of spectacular mountains, gorges, water courses and plateaux. Points of special interest are Fortescue Falls, Circular Pool, Dales Gorge, Joffre Falls and Red Gorge. The Ranger in charge of this National Park has his headquarters in the Park and camping is permitted in designated areas.

HASSELL NATIONAL PARK — This A Class Reserve of 1 281 hectares is situated along the main Albany — Bremer Bay road and is reserved for the protection of its flora and fauna.

JOHN FORREST NATIONAL PARK — This National Park is an A Class Reserve of 1 578 hectares situated in the Darling Range about 27 km from Perth. It is Western Australia's first National Park being declared in 1895 and contains open forest and woodland and has outstanding displays of wildflowers during the Spring. There is a natural swimming pool for the enjoyment of the public and the Park is serviced by a Ranger staff of 8.

KALAMUNDA NATIONAL PARK — An A Class Reserve of 375 hectares. This area is rich in wildflowers, particularly Blue Leschenaultia, and it has been the Authority's policy to leave it mainly undeveloped.

KALBARRI NATIONAL PARK — This A Class Reserve of 186 076 hectares is quickly becoming one of the State's most popular National Parks. Located some 644 km north of Perth near the mouth of the Murchison River, the park has outstanding gorge scenery along the river, and the limestone and sandstone cliffs provide magnificent coastal scenery. Good accommodation including hotel/motel, camping and caravan parks, swimming, surfing and fishing facilities are available at the townsite at Kalbarri.

LEEUWIN-NATURALISTE NATIONAL PARK — Consists of a series of Class A Reserves of 13 239 hectares, mainly on the ridge of granite gneiss and limestone which runs along the coast between Cape Naturaliste and Cape Leeuwin. Spectacular caves, coastal scenery, heathland and forest occur in this Park.

LESMURDIE FALLS NATIONAL PARK — A small A Class Reserve of 56 hectares which gives good views of the coastal plain and the suburban Perth metropolitan area. The area is a popular picnic spot situated 24 km from Perth.

MILLSTREAM NATIONAL PARK — Class A Reserve 24392 is about 441 hectares and was vested in the National Parks Authority in April, 1977. This park represents a number of endemic plant and animals species and is one of the only areas in the Pilbara featuring permanent fresh water.

MOORE RIVER NATIONAL PARK — This area of 17 543 hectares located about 113 km north of Perth, is outstanding for its wildflowers. It is the Authority's intention at present, to leave this area undeveloped as it is a good representative area of undisturbed Swan coastal plain.

NAMBUNG NATIONAL PARK — A National Park of 17 491 hectares situated south of Jurien Bay, this area is becoming increasingly popular for its wildflowers and strange natural formations, the Pinnacles. A number of caves in the area are being kept sealed to protect them from vandalism. Two Rangers are resident in Cervantes townsite.

NEERABUP NATIONAL PARK — This Class A Reserve of 1 078 hectares is located on the Perth — Yanchep Road a few kilometres north of Wanneroo and is being maintained in its natural state. It is a good representative sample of Spearwood formation limestone.

PEAK CHARLES NATIONAL PARK — Centred on spectacular granite outcrops representing flora of the southwest portion of the goldfields this C Class Reserve of 39 959 hectares has excellent scenic panoramas of surrounding areas.

PEMBERTON NATIONAL PARKS — Areas collectively known as the Pemberton National Parks, consisting of Class A Reserves 7691 (Warren National Park) 1 356 hectares,



Granite boulders, Porongurup National Park.

7692 (Beedelup National Park) 1 531 hectares, 19424 (Brockman National Park) 48 hectares, 17519 (Miscellaneous Reserves alongside alignment of Old Vasse Road) 206 hectares, and Class C Reserve 19857 at Pemberton 122 hectares. A delightful caravan park is situated in the Pemberton reserve. A Ranger is based on the Old Vasse Road between the Warren and Beedelup National Parks. All the Parks are situated in outstanding Karri forest.

PORONGURUP NATIONAL PARK — An A Class reserve of 2 401 hectares between the Stirling Range National Park and Albany. It incorporates the granite peaks of the Porongurup Ranges, the slopes of which are heavily forested with Karri Eucalyptus diversicolor. Accommodation is available at the nearby Karribank Motel/Guest House. A Ranger is stationed in the park.

RUDALL RIVER — Class A Reserve 34607, about 1 569 459 hectares around Rudall River, east from Roy Hill and Nullagine. An excellent representation of sand dune and salt lake system of the North-East Pilbara.

SCOTT NATIONAL PARK — An A Class Reserve of 3 273 hectares situated 6.5 km north-east of Augusta townsite originally created in 1959 to protect the waterways at the junction of the Scott and Blackwood Rivers and the Jarrah, Marri and Karri forests existing in the area. Named after Robert Scott who first selected land in the southern portion of the Reserve in 1871.

SERPENTINE NATIONAL PARK — This A Class Reserve of 635 hectares on the Serpentine River, is popular for picnicking and is noted for its waterfall. The Park has a resident Ranger.

SIR JAMES MITCHELL NATIONAL PARK — An A Class Reserve consisting of an area of 1 087 hectares stretching along the South West Highway, for a length of 64 km. As its width is 100 metres on each side of the road, it ensures that this stretch of road will remain a drive displaying natural flora.

STIRLING RANGE NATIONAL PARK — An A Class Reserve of 115 671 hectares. This is a major National Park and is situated 322 kilometres south-east of Perth. It is noted for its wildflowers and mountain peaks, the highest of which, Bluff Knoll rises 1073 metres above sea level. In order that the surrounding farmland be protected from bush fires escaping from this rugged park, an extensive system of fire breaks has had to be cut. There is a commercial caravan park on the northern boundary of the park opposite the Bluff Knoll turn-off, and overnight camping is permitted at Moingup Springs. Two Rangers are resident in the Park.

STOKES NATIONAL PARK — An area of 9 493 hectares on the south coast of Western Australia adjoining Stokes Inlet and Lake Cobinup Reserve, to preserve the foreshores of these waterways. A Ranger in charge is in residence in the Park.

TATHRA NATIONAL PARK — An A Class Reserve of 4 323 hectares. The area is noted for its wildflowers and for the present is being maintained in its natural state.

TORNDIRRUP NATIONAL PARK — This Reserve with an area of 3 868 hectares is located south-west of the town of Albany. It is noted for its flora and fauna and rugged coastline with particular tourist attractions being the Gap and the Natural Bridge. The area is maintained by a Ranger situated in the Park.

TUNNEL CREEK NATIONAL PARK — This Reserve has an area of 91 hectares. Situated about 184 km east of Derby and 29 km south-east of Windjana Gorge National Park, Tunnel Creek is a stream which flows across the Napier Range and through a large natural tunnel eroded in the limestone by the creek itself.

WALPOLE-NORNALUP NATIONAL PARK — This Reserve of 18 116 hectares is located on the South Coast of Western Australia some 418 km south-east of Perth. It is an area of great scenic beauty, noted for its flora, fauna, fine stands of Karri and Tingle forest, coastal views and enclosed inlets. The establishment of a camping and caravan park at Coalmine Beach, controlled by the Authority, has resulted in the area becoming a popular resort and noted for its swimming, fishing and yachting. There are four resident Rangers.

WALYUNGA NATIONAL PARK — Walyunga National Park consists of an area of 1 790 hectares, located approximately 37 km north-east of Perth. It is noted for its scenic views and flora and for the fact that it was a large camping area formerly used by Aborigines. The establishment of facilities at Walyunga and Long Pools together with the rapids that occur during the winter, have resulted in the Park becoming one of the most popular picnic spots adjacent to Perth. There is a Ranger in residence.

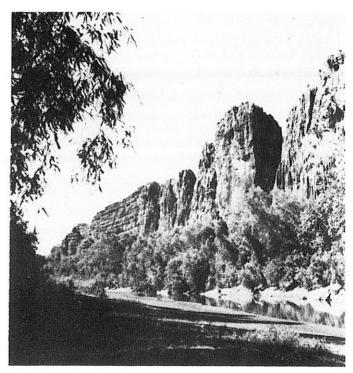
WATHEROO NATIONAL PARK — This A Class Reserve of 44 324 hectares is controlled by the Ranger stationed in Cervantes and is considered valuable for the preservation of native flora and fauna.

WILLIAM BAY NATIONAL PARK — An A Class Reserve consisting of 1 867 hectares and noted for its flora and fauna and coastal scenery. A Ranger is in residence.

WINDJANA GORGE NATIONAL PARK — This A Class Reserve of 2 134 hectares situated in the Kimberleys, contains a remarkable gorge where the Lennard River cuts through an ancient limestone reef. The gorge is 4 km long and has nearly vertical walls up to 76 metres high.

WOLF CREEK CRATER NATIONAL PARK — An area of 1 460 hectares situated 104 km south of Halls Creek and set aside for the protection of a meteorite crater 800 metres wide, 49 metres deep and an area of 1 296 hectares.

YALGORUP NATIONAL PARK — The land portion of this A Class Reserve of 11 545 hectares was placed under the National Parks Authority's control in January 1968. The park is located on the coastal plain south of Mandurah and contains a system of parallel lakes which are noted for their birdlife. It possesses delightful heath and woodland scenery, interesting geological features and also is noted for its flora and animal life. The Ranger resides in the park.



Windjana Gorge National Park.

YANCHEP NATIONAL PARK — This A Class Reserve of 2 799 hectares, located 51 km north of Perth was established as a Park in 1905. It is a noted tourist attraction containing caves, a swimming pool, golf course, boating, ovals and picnic grounds together with a fauna exhibit of koalas. Accommodation is provided by the Yanchep Inn (licenced). Development around the entrance to this Park may suggest that large areas have been given over to tourist facilities, but in fact 90% of the Reserve is still maintained in its natural state. Loch McNess provides a haven for a large assortment of water fowl and other birdlife while the surrounding bushland is rich in native flora and fauna. This Park with its many facilities for the public is maintained by 20 Rangers staff.

RESERVES

ARALUEN-CANNING RESERVE — A small strip of land of 20 hectares. The area lies between the Canning River and McNess Drive and extends from the vicinity of Araluen to the boundary of Canning Dam Water Reserve.

CHARLES GARDNER FLORA — An A Class Reserve of 792 hectares. It is an area of outstanding botanical interest and is located south of Tammin.

EAST PERTH CEMETERY — An A Class Reserve of about 5 hectares. This area is situated on high ground at the eastern end of the City of Perth and is the last resting place of many of the State's early pioneers.

GEEKABEE HILL FLORA — A small area of 4 hectares reserved for the protection of flora (Lambstails).

HADDLETON FLORA — An area comprising 1325 hectares, reserved for protection of Boronia and other flora. It is located south of the Wellington Dam catchment area in the south-west of the State.

KEANE'S POINT — A Reserve of about 2 hectares, leased to the Royal Freshwater Yacht Club Inc., which has established excellent aquatic facilities there.

KINGS PARK — SMALL PORTION — An area of 0.4 hectares, this site is leased for the purpose of a refreshment kiosk, Bernies.

MATILDA BAY — Class A Reserve of about 25 hectares situated about 5 km from Perth. This Reserve now contains the Administration Headquarters of the National Parks Authority. Improvements to access roads, parking area and public boat launching ramps in recent years have enhanced the appearance and utilisation of this Reserve by the public. The Royal Perth Yacht Club Inc., Mounts Bay Sailing Club

The Royal Perth Yacht Club Inc., Mounts Bay Sailing Club Inc., Perth Dinghy Sailing Club Inc., The Governors of Hale School and the 1st Pelican Point Sea Scouts Group lease sites on this Reserve whilst the University of Western Australia Rowing Club occupies a boatshed on the foreshore. These Clubs and the Sea Scouts are making worthwhile contributions towards providing facilities for the enjoyment of aquatic sports on the Swan River.

OLD MILL RESERVE, SOUTH PERTH — A small Reserve of about 0.2 hectares located at the South Perth end of the Narrows Bridge. The area is leased to the firm of Bristile Limited, who arranged restoration of the Old Mill and cottage and established a historical museum on the site.

RESERVE EAST OF PORONGURUP RANGES — An A Class Reserve comprising 61 hectares located 40 km north of Albany. Reserved for flora protection.

PENGUIN ISLAND — An A Class Reserve of 13 hectares which is situated about 48 km south of Perth and 1.6 km offshore near Safety Bay. It is a sanctuary for penguins and a portion of this island is leased as a holiday centre.

STOCKYARD GULLY — An A Class reserve of 1 406 hectares, reserved for its conservation of flora, water and protection of caves.

Stockyard Gully is a small stream that drains low sand plain country south west of Eneabba. The stream, which is intermittent, flows westward to its north-trending belt of coastal limestone, and disappears into a series of subterranean caverns. The gully lies mainly in rough karst country with limestone outcrop lightly clothed in low heath.

YANCHEP FLORA — Comprises Class A Reserve of 113 hectares, situated 48 km north of Perth and reserved for the protection of flora and has been left in its natural state.

ADMINISTRATION

GENERAL STATEMENT

The inaugural President Mr. C.F.H. Jenkins retired on 31st July, 1980 after more than 21 years and nearly 11 years

President of the National Parks Authority and its predecessor, the National Parks Board.

The Hon. Minister for Conservation and the Environment appointed Professor A.R. Main as President from 1st August, 1980. As a foundation member of the Environmental Protection Authority, Professor Main is widely experienced in national park management and related conservation matters and was authorised to attend Authority meetings as an observer during the year 1979-80.

There were a number of staff movements during the year, including the retirement of the first Director of the Authority, Dr. F.G. Smith. He was a most concerned and hard working officer who can look back on his achievements with pride. His work included the formulation and later publishing of the National Parks Authority's Management Policies in 1977 and the preparation of working plans for 15 national parks. The Authority is the first Australian national parks service to publish its Policies.

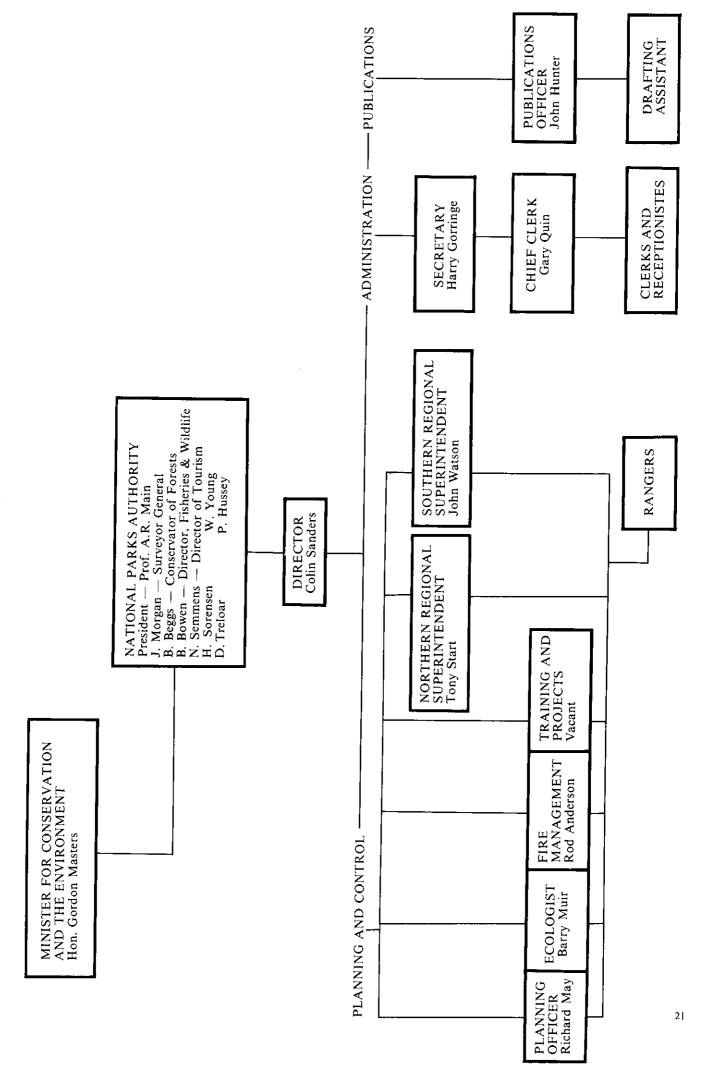
Dr. Smith was succeeded as Director by Mr. Colin Sanders, formerly Chief Environmental Officer — Planning and Research, Department of Conservation and Environment. The Authority acknowledges the assistance provided to it over the period 17th August to 19th November, 1980 when Mr. Peter Browne-Cooper — Assistant Director of the Department of Conservation and Environment, fulfilled the position as Acting Director of the Authority.

Also during the year saw the retirement of Mr. Peter Congreve, Superintendent of Yanchep National Park since 1970. The Authority is grateful for the years of concerned effort Mr. Congreve put in to assist in the development of Yanchep National Park.

The salaried staff of the Authority has remained at 16 with one position — Project Officer (now Training and Project Officer) being vacant throughout the year. The Ranger establishment remains at 81, comprising two Superintendents, 76 Rangers, a mechanic and two office assistants.

The holding of Ranger staff numbers at the present ceiling has proven burdensome on the Authority, in that with 4.4 million hectares of land vested in it, comprising 50 national parks and 20 other reserves, only 21 areas are manned.

The Authority sees that there is a priority to establish a fultime Ranger presence in a number of areas where tourist visitation is rapidly increasing, and where management is necessary to protect both the national park and surrounding privately held lands. An on-going presence through the development of Ranger stations is needed for Chichester Range, Millstream National Parks, the wild flower national parks in the central Perth basin — Watheroo, Tathra and Alexander Morrison, Boranup Block of the Leeuwin-Naturaliste National Park and the recently proclaimed D'Entrecasteaux National Park on the south coast. The latter area comprises 36 000 hectares of superb coastal landscape and forest hinterland between Donnelly River and Windy Harbour.



FINANCE

STATEMENT OF RECEIPTS AND PAYMENTS FOR THE YEAR ENDED 30TH JUNE, 1981

RECEIPTS:

PREVIOU 1979/80	JS YEAR	RECEIPTS	1980	1/81
\$	\$	RECEIT 15	\$	\$
		Opening Balance National Parks & Other Reserves		
47918 22905 39263 8664		Rents — General John Forrest Geikie Gorge Kalbarri	42104 23697 37661 9804	
7375 13988 31491 13523		Serpentine Walpole-Nornalup Pemberton Walyunga	8469 17907 38580 13617	
156359 6500	347986	Yanchep Other Parks & Reserves	144696 11581	348116
12191		OTHER RECEIPTS Sundry Receipts	36657	
18196 73264 2100	105751	Sale or Surplus Agents Refunds and Suspense Wishing Well	16289 116397 2300	171643
1000000		GRANTS		
1990000	1990000	Treasury	2196000	2196000
	$\frac{76}{2443813}$	Closing overdrawn		$\frac{46}{2715805}$

PAYMENTS: P I 19

PREVIOUS YE 979/80	EAR	PAYMENTS	198	0/81
\$	\$		\$	\$
	10	Opening Overdrawn Balance ADMINISTRATIVE EXPENSES	·	
88350 247806		Head Office expenses Head Office salaries	81728 294838	
16346 36718 56580	445800	Workers compensation and public liability Contributions to staff endowment fund	16383 37141	105205
	443600	Payroll Tax	65215	495305
		NATIONAL PARKS AND		
925565		OTHER RESERVES Wages	1068956	
591227		Operating & Maintenance costs Improvements, including buildings, new vehicles,	777469	
317603 4155	1838550	plant, bush fire control & equip. Walyunga — Purchase Instalment	206953 4047	2057425
				
		OTHER PAYMENTS		
60924 96429		Sundry Payments Refunds & suspense	57033 103666	
2100	159453	Wishing Well	2300	162999
	2443813			<u>2715805</u>

H.R. Gorringe, Secretary, National Parks Authority

I certify that this statement is in accordance with the accounts and records produced.

A.E. Tonks, Auditor General

PERSONNEL

STAFF ESTABLISHMENT

PROFESSIONAL AND TECHNICAL

Director	1	
Regional Superintendents	2	
Ecologist	1	
Biologist (Planning)	1	
Fire Management Officer	1	
Project & Training Officer	1	(vacant)
Drafting Assistant	1	
	8	

ADMINISTRATIVE AND CLERICAL

Secretary	1
Publications Officer	1
Senior Clerk	1
Clerks	4
Typists	3
	10

SUPERINTENDENTS, RANGERS AND ANCILLARY STAFF

Superintendents	2
Rangers	64
Mobile Rangers	12
Female Office Assistants	2
Mechanic	1
	81
	00

HONORARY RANGERS

The following honorary rangers have been appointed under the National Parks Authority Act. Their help in assisting the patrol and supervision of the National Parks concerned is greatly appreciated.

R.A. Ayres	Penguin Island
J. Boyd	Walpole-Nornalup
E. Chapman	Haddleton
P. Congreve	Eyre
A. Handy	Eucla
C.F.H. Jenkins	
C.W. Russell	Donnelly River
Dr. D.L. Serventy	Gooseberry Hill
Dr. F.G. Smith	-
C.G. Somner	Haddleton
A.R. Trigwell	Haddleton
B.F. Trigwell	Haddleton
N. Walmsley	
A.M. Walters	Wolf Creek

T.R. Walters TRAINING

During 1980/81 individual park Rangers attended one-day seminars which were conducted by various local Shires. One Ranger attended an Advanced Bush Fire Course and five others participated in the Fire Weather Officers Course. Two courses were run by the Western Australian Bush Fires Board

Wolf Creek

Yanchep National Park was again the scene for the second annual Training/Competition Practical Day where skills in

fire fighting and prevention techniques were put to the test by Ranger staff from all over the State. Training in the field is continuing.

During the year three Rangers took part in biological surveys in some National Parks where they learned trapping and various other survey techniques.





Training in techniques of firefighting and equipment, Yanchep National Park.

Photos: R. Anderson and J. Hill

LIBRARY

Re-organisation of the National Parks Authority library commenced early in 1980. At that time the existing stock of publications was only listed and filed in a numerical order.

With no professional librarian on the staff, it was required of the administrative staff to set up and commence the library operation on a professional basis. This has been done by cataloguing holdings under the Dewey Decimal classification scheme.

To satisfy the needs of the professional and field staff, the purchase of publications increased during 1980/81 to complement relevant research and management programmes in hand.

The re-organisation of the library has allowed it to be used by staff members as well as other government department officers and various students and bodies associated with environmental management and research studies.

Arrangements were made during the year with the Library Board of Western Australia to enlist as a member of the Inter-Library Loan System.

A total of 379 new publications were accessed during the year including some ten specially requested book purchases.

