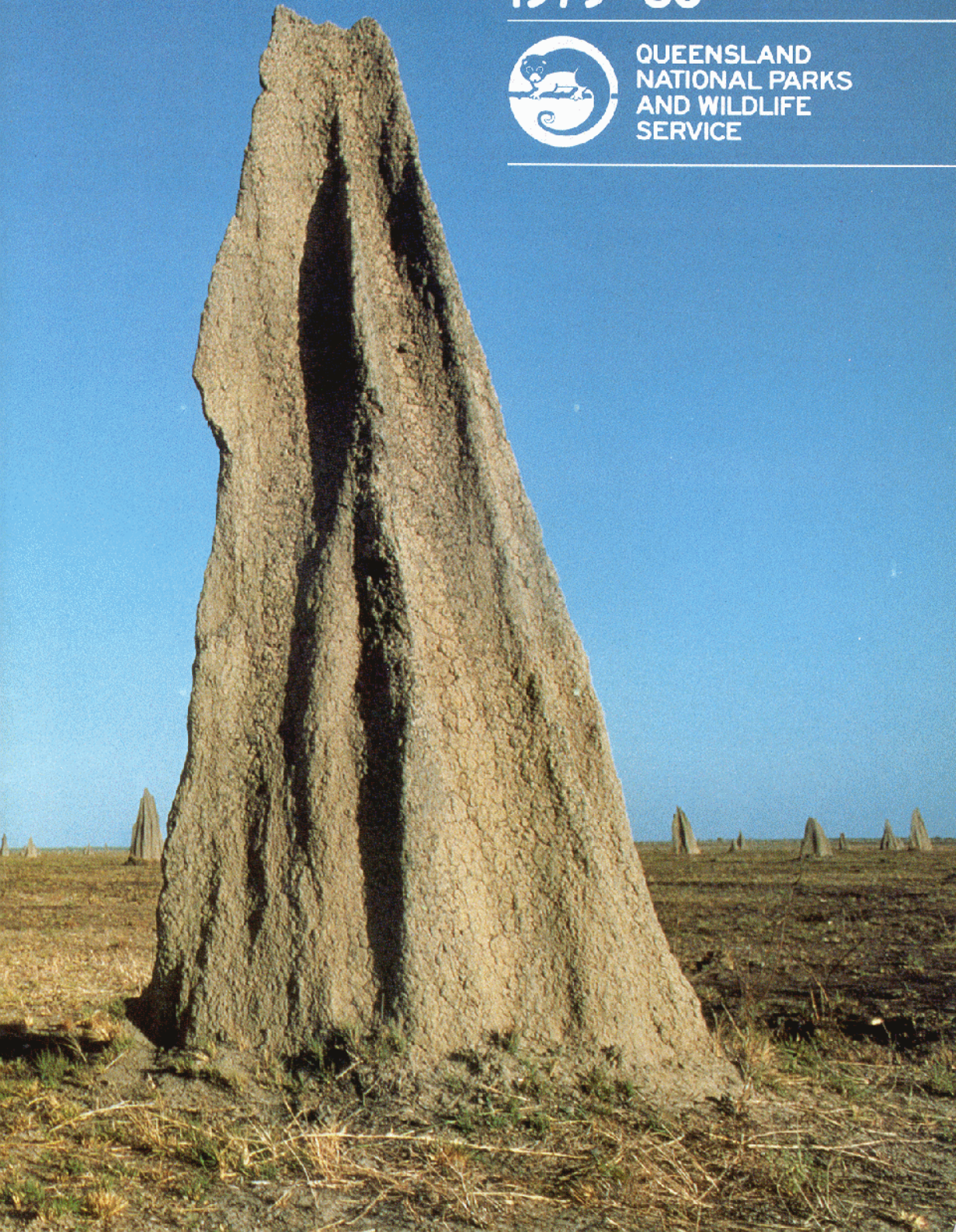


Fifth Annual Report 1979-80



QUEENSLAND
NATIONAL PARKS
AND WILDLIFE
SERVICE



Errata

Page 5, column 1, line 65: insert 'ban' after 'export trade'.

Page 9, column 1, line 4: for '196' read '164'

Page 13, column 1, line 1: for 'National' read 'Natural'.

Page 21, column 1, line 28: for 'Parlimentary' read 'Parliamentary'.

Page 22, column 2, line 10: for 'Queensand' read 'Queensland'



**QUEENSLAND
NATIONAL PARKS
AND WILDLIFE
SERVICE**

PO Box 190
North Quay, Queensland
Australia, 4000
Telegraphic code QUENPAWS
Head Office
MLC Centre
239 George Street
Brisbane
Telephone (07) 224 0414
G W Saunders
Director

19 September, 1980

The Honourable Ivan J. Gibbs, M.L.A.,
Minister for Culture,
National Parks and Recreation,
Brisbane.

Sir,

I have the honour to submit to you for presentation to the Parliament the Fifth Annual Report of the Queensland National Parks and Wildlife Service.

This Report covers the operations of the Service during the year ended 30 June, 1980.

Yours faithfully,

(G. W. Saunders)
Director

Fifth Annual Report 1979-80



QUEENSLAND
NATIONAL PARKS
AND WILDLIFE
SERVICE



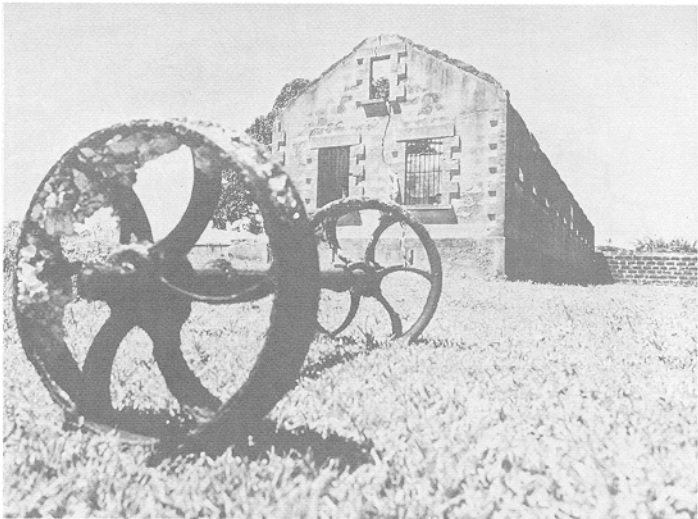
Cover

The stark beauty of Lakefield National Park

Inset

Australian bustard, a park inhabitant

Historical penal ruins on Saint Helena Island





Introduction



Quite early in the financial year, the Honourable T. G. Newbery, M.L.A., Minister for Culture, National Parks and Recreation, relinquished his portfolio. He was the Service's second Minister in its short history and, under his guidance, the Service prospered and grew, in terms of estate and staffing. I wish to record my personal and official expression of thanks for his support as Minister from December, 1977 to August, 1979, and to wish him and Mrs Newbery continuing good health.

It was appropriate that his last public function on behalf of the Service was to open the new office and information centre at Carnarvon National Park.

Highlights of the gazettals of national parks listed later in this report were Lakefield and the Mount Moffatt and Cape Cleveland major extensions. Lakefield alone exceeds half a million hectares, and a Service conference extending over four days was held at the Forestry Department's training centre at Gympie to gather data and help formulate interim management guidelines for this park 'of a thousand lakes', as a Sunday Mail magazine feature described it.

A park of historic interest was declared over Saint Helena Island in Moreton Bay, and is being managed through a committee involving the tourist and grazing lessee of the island.

The most significant environmental park gazetted was the Townsville Town Common. The Service hopes to make a major effort in the coming years to help its trustee, the Townsville City Council, to develop this park on soundly-based lines for nature conservation.

The loan appropriation for purchase of land for nature conservation and nature-based recreation was less than for the previous year. Nevertheless, at \$540,000, it enabled some significant purchases, and these are detailed in the report.

The Cooloola Management Plan attracted tremendous public interest, and even though the four-wheel-drive clubs and members put in approximately 500 identical comments, a total of 660 submissions was made by the public, indicating the growing interest in national parks in general and Cooloola in particular. The plan is approaching its final form and, when approved, will be the first such document for the Service.

Exercises like this are extremely costly and demanding of staff and time. Because of this, and while staff restrictions remain, management plans involving full public participation can only be undertaken on the most popular of parks or those with the most pressing management problems. A major example will be the Girraween-Sundown complex of parks.

Green Island, the Scenic Rim and the central Queensland complex of parks were also subject to special management planning effort involving other government departments and private interests. The Service is of course also involved with the Great Barrier Reef Marine Park Authority in planning and developing the Great Barrier Reef park system.

However, for the foreseeable future, most of the State's staffed national parks will continue to be operated as now, using broad interim management guidelines. The inbuilt experience and know-how which the Service has in national park management seems to serve it very well, if public acceptance of our stewardship of the parks is any guide.

Some clerical and wildlife ranger staff have been particularly hard pressed by reason of high kangaroo numbers in many parts of Queensland. Extra staff had to be seconded to cope with the demand for the 1.5 million tags allotted for calendar year 1980. A collapse in skin prices occurred which relieved the situation later in the financial year. It is hoped that the removal of the U.S. export trade, if it occurs, will mean a less wildly fluctuating demand.

It is difficult to keep my introduction to this report brief while trying to mention every highlight of the year. However, some at least must receive special mention.

The International Year of the Child involved the Service in many activities, including building a special children's activity area at the North Tamborine Environmental Park with the voluntary help of student labour.

The World Conservation Strategy was launched with Service involvement in March, 1980. Sponsored by the IUCN and World Wildlife Fund, it is designed to enable governments, industry

and conservationists to work towards balanced land use which accommodates, rather than subverts, nature and the basic role it plays in the health of the planet.

The Second World Wilderness Congress in Cairns, almost at the close of the financial year, involved the Service in a substantial way. Unhappily, especially before the event, there were attempts to politicize it but, despite some orchestrated media opposition, it achieved much of what it set out to do and the Service was honoured to be a part of it. Delegates were impressed with what they saw of Queensland, and it is certain that tourism and other benefits will flow, and that the need for large wilderness parks is better understood.

The report details a continuing programme of major new works on national and environmental parks, from walkways in the Trezkin Caves at Chillagoe to a new camp ground and amenities at Green Mountains in the Lamington area. All these new facilities unfortunately add to the burden on maintenance funds. Keeping up standards is proving increasingly difficult.

There has been a great improvement in relations with aviculture interests, following the simplification of administrative procedures.

The Service is involved—generally, technically and in an advisory role—with some unusual industries. Deer farming is attracting great interest, while there could hardly be two more contrasting enterprises than crocodile and butterfly farming, both of which the Service is helping to guide.

The quality of our published material continues to draw favourable comment and, in particular, a calendar produced for 1980 has been very favourably received.

Research work of a high standard is being maintained and staff have represented the Service at overseas conferences, including the first international conference on the environment sponsored by UNESCO.

Our new Minister, Honourable I. J. Gibbs, M.L.A., is showing great interest in the Service, and has already visited places as far apart as Saint Helena Island, Cooloola, Carnarvon Gorge and Lakefield. He has opened the new extensions to Hermitage Research Station, near Warwick, and visited the larger research centre at Pallarenda, near Townsville, and inspected extensions there also. He has met many of the staff both in head office and the country, and I value the great support he has shown the Service from the time he took office.

I am certainly not the first presenter of an annual report to assert that his organization could achieve more with more staff and vehicles. I think it is true, however, that our case is stronger than most. Our charter demands that we service the remote reaches of the State because this is where the richest jewels of nature lie. We need many one-man stations and each man in this situation must be independently mobile.

The Service is also particularly affected by staff growth limits because we lacked the infrastructure and built-in office systems of established departments when the restrictions came into force. We can no longer use the day-to-day back-up of the larger departments of similar field spread with whom we were once closely associated—Primary Industries, Forestry and Lands.

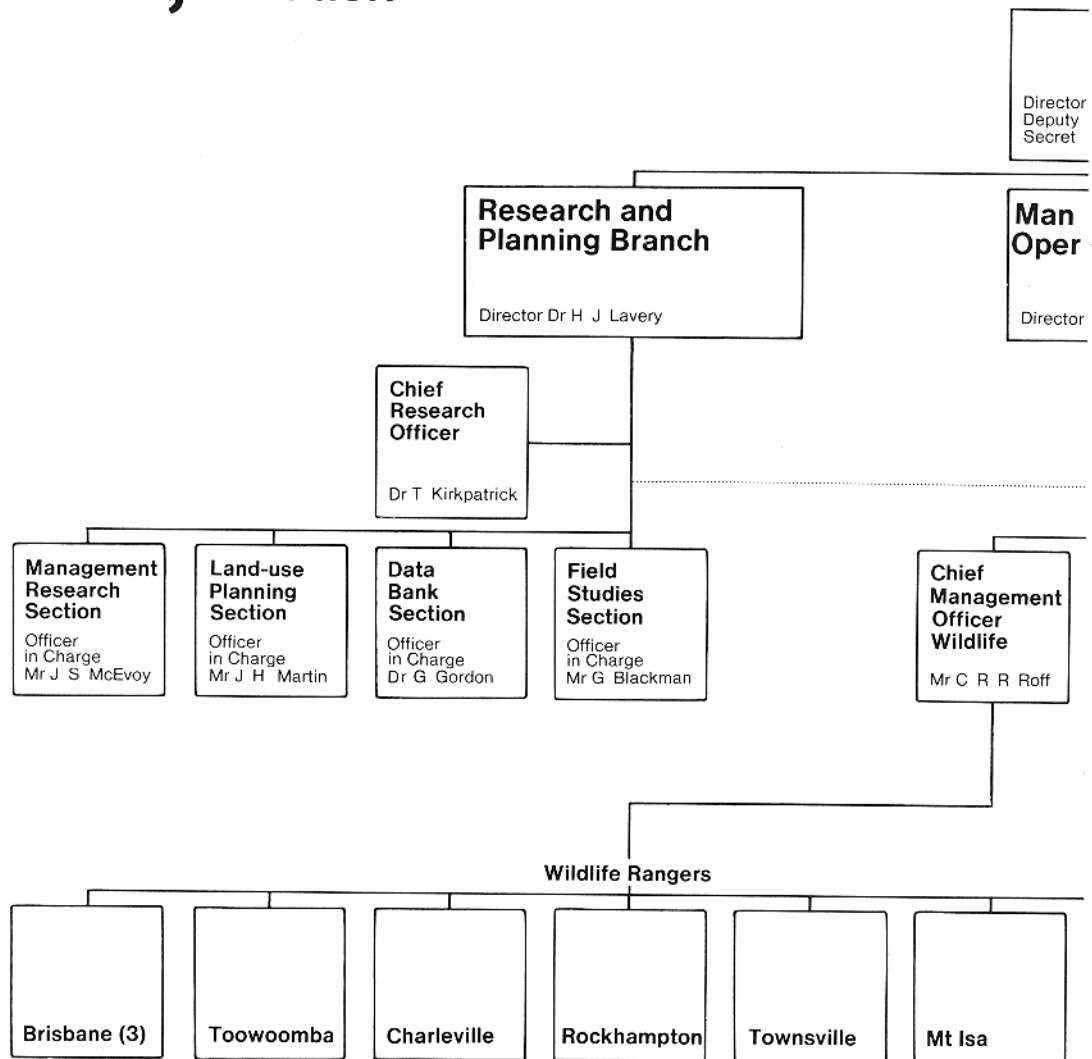
In the last three years, our estate has more than doubled to 1.67% of the area of the State, and we have nearly 400 national and environmental parks, which absorb over two-thirds of our total budget directly and indirectly. Staff figures in the same period have grown less than 40%. Ultimately, the standards of park maintenance must decline.

An historic staff intake was that of eight cadets, the first graduates of the Associate Diploma course in Wilderness Reserves and Wildlife from Queensland Agricultural College. The Service was a prime mover in this course. Since approved staff increases are based on numbers primarily, this meant taking a conscious decision to employ people who initially would not contribute as much as experienced staff in administrative, management or research fields might do. However, I perceive the need to build for the future and am well pleased with the initial performance of these cadets.

I record my appreciation of the efforts of staff during the year in often difficult and trying situations. What success the Service has is due to the efforts of its officers. I am in their debt.



Organization





Dr G W Saunders
Director Mr C W Price
ary Mr W J M Chadwick

Management and Operations Branch

Mr H S Curtis

Administration Branch

Secretary/Deputy Director

Technical Service Section

Chief Technical
Services Officer
Mr P S Ogilvie

Acquisitions and Gazettals

Technical
Administration
Officer
Mr K J Green

Clerical and General Administration

Administration
Officer
Mr R N Krause

Chief Management Officer Parks and Reserves

Mr C D Wilder

Drafting Sub-Section

Draftsman
in Charge
Mr D Collins

Regional Superintendents

Cairns

Brisbane

Gympie
Maryborough

Rockhampton

Cairns

Sub-Regional
Park Rangers
and Overseers
resident on or
near staffed
parks



Administration



A number of gains were made in terms of staffing and accommodation, although there are still a number of problems to be overcome.

By the end of the year, 141 salaried and 196 wages staff were employed in various parts of the State but, although the Service received favourable consideration in the allocation of new staff compared to some other areas of the Public Service, the Government's staff ceiling policy has not enabled the Queensland National Parks and Wildlife Service to offer to the public the degree of guidance, advice and assistance required by the increasing awareness of nature conservation values and needs.

The difficulty has been particularly pronounced in most of the regional centres where the lack of clerical and typing staff has curtailed service to the public. The accounts section is operating under work stress conditions, and continued difficulty has been experienced in the wildlife management area where the increase in kangaroo harvesting has put Service staff under heavy pressure. Three additional staff were allocated during the year to the issuing of kangaroo tags, permits and associated work, but the expansion of overseas markets for kangaroo products, together with the development of the game management industry, will undoubtedly maintain the strain on this arm of the Service.

An important step forward was taken with the entry to the Service of the first eight cadets from the first group of students to receive Associate Diplomas from the Wilderness Reserves and Wildlife Management course at Queensland Agricultural College at Lawes. The course was established to provide cadets to the Service ranger ranks, and the first appointees have contributed quite significantly to Service thinking on a wide range of conservation matters. Future intakes are intended to provide cadets to staff the enlarged national park estate in Queensland.

Accommodation

Major progress was made with the decision to transfer the head office of the Service from cramped quarters in Albert Street to the new MLC Centre at the corner of George and Adelaide Streets in Brisbane. The move is expected to take place early in the 1980-81 financial year.

Accommodation will be provided over three floors, with room for the future expansion of the Service, and the new headquarters will be a key element in projecting the Queensland Government's awareness of environmental needs.

Construction commenced on the new regional administration and research centre at Moggill in Brisbane, and completion of this facility in early 1981 will enable re-location of staff who have been accommodated at the Animal Research Institute at Yeerongpilly since the inception of the Service in 1975.

Again, sincere appreciation is extended to the Department of Primary Industries for permitting Service personnel to occupy their accommodation for such a lengthy period.

A new office block and laboratory improved facilities at the research establishment at Hermitage, near Warwick, and office accommodation was provided during the year for a Wildlife Ranger stationed at Toowoomba. Additional accommodation at Mackay, a change of office accommodation at Gympie and additional temporary accommodation at Pallarenda, Townsville, also enabled the Service to improve its performance in key areas.

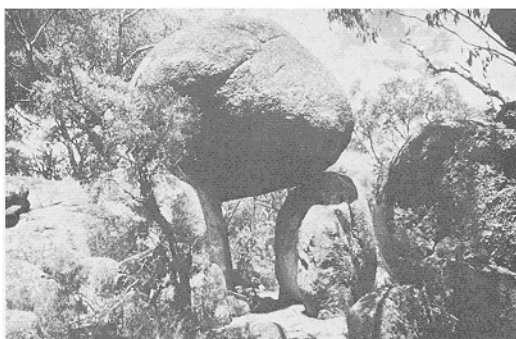
Acquisitions and Gazettals

At the end of the financial year, the Queensland National Parks and Wildlife Service had before it 879 proposals for park purposes, compared to 854 at the start of the year.

Funding for land acquisition was less than in the previous year, and parcels which were taken up were mainly extensions to existing national parks such as Girraween, Edmund Kennedy, Noosa and the Scenic Rim complex.

Eleven new national parks were gazetted over a total area of almost 540 000 hectares, and 12 additions, totalling more than 95 000 hectares, were made to existing national parks.

Granite Arch, Girraween



New national parks

NP 289—Parish of Uxbridge (gazetted 14-7-79). This is a new park of about 305 hectares situated about 34 kilometres north-east of Miriam Vale. It was previously held as part of an occupation license which was voluntarily surrendered by the lessee. The park contains the well known landmark of Round Hill.

NP 3004—Parish of Noogoon (gazetted 6-10-79). This is Queensland's first historic national park and covers about 75 hectares of land on Saint Helena Island, in Moreton Bay. The island, which has had many and varied uses, began as a penal settlement in 1866, and many of the buildings from this period are still in evidence.

NP 10—Parish of Lakefield (gazetted 27-10-79). This park covers an area of about 528 000 hectares just north of the township of Coen on Cape York Peninsula. The park contains a representation of approximately 60% of the habitats and landforms of Cape York Peninsula, ranging from dry ant hill-studded plains to vast wetland systems, spectacular rainforest-clad mountain ranges and coastline of rugged grandeur.

NP 227—Parish of Bendidee (gazetted 24-11-79). This park was formerly part of a state forest and is vegetated mainly with heavy brigalow—belah, wilga and tea-tree scrub, with some intrusions of forest timber species. The park is about 931 hectares in area and is approximately 32 kilometres north-east of Goondiwindi.

NP 181—Parish of Wattle (gazetted 26-1-80). This park was formerly part of Charlevue Holding. It is 6 359 hectares in area and is situated 15 kilometres west of Dingo on the southern side of the head of Charlevue Creek. The area is highly scenic and is most valued for its brigalow and poplar box communities.

NP 296—Parish of Bunker (gazetted 16-2-80). This park covers Northwest and Wreck Islands. These islands, which are within the Capricorn Group, are about 80 kilometres north-east of Gladstone and include some of the most important mutton bird and green and loggerhead turtle rookery areas in Eastern Australia. The park is approximately 111 hectares in area.

NP 160—Parish of Russell (gazetted 23-2-80). The vegetation of this park on the Russell River comprises palm rainforest, with tea-tree and barringtonia swamps on the lower regions and tropical rainforest in the higher country. The park is about 2 930 hectares in area and is situated south of Cairns.

NP 31—Parish of Long Island (gazetted 1-3-80). This park, which is 160 kilometres north of Rockhampton, covers part of Wild Duck Island and is about 207 hectares in area. It is recognized as an important flatback turtle rookery and is one of only two known rookeries of this species in eastern Australia.

NP 666—Parish of Crows Nest (gazetted 8-3-80). This park is about 473 hectares in area and features shallow but beautifully coloured and textured sandstone caves and commanding views of the Perseverance Creek Dam.

NP 1694—Parish of Barron (gazetted 5-4-80). This national park of about 47.8 hectares has been declared over an area of land known as Hasties Swamp and is about 3 kilometres south of Atherton. The area, which was formerly a camping and water reserve, is of great importance in providing a suitable habitat for numerous and varied species of birds—especially water birds. It is one of the few areas on the tableland suitable for breeding.

NP 906—Parish of Bassett (gazetted 10-5-80). This park is north-west of Mackay on Reliance Creek and was formerly a scenic reserve and vacant Crown Land. It contains the very best of only a few examples of palm vine forest surviving on the coastal lowlands south of Ingham and north of Gladstone. The park is 13.9 hectares in area.

Additions to Existing National Parks

NP 796—Parish of Samsonvale (gazetted 14-7-79). In this gazettal, an area of 7.5 hectares of Crown Land, formerly a road, was added to Maiala National Park for better management purposes.

NP 278—Parish of Eurimbula (gazetted 17-11-79). Approximately 2 218 hectares of land was added to the existing national park at Eurimbula. It consists mainly of rugged granite mountains covered by open eucalypt forest and features the prominent landmark known as Arthur's Seat, which rises to a height of over 500 metres.

NP 477—Parish of Conondale (gazetted 1-12-79). The 127-hectare addition enabled the complete catchment of one branch of Scrubby Creek to be included within the park, which is about 10 kilometres south-west of Kenilworth. The vegetation consists of well-developed wet eucalypt forest and stands of rainforest along the creek valleys.

NP 236—Parish of Aubrey (gazetted 21-12-79). A total of 65 960 hectares of land was added to this national park in the Central Highlands. The additions comprised the former Mount Moffatt and part of Welcome Pastoral Holdings and includes some unique areas of sandstone gorges and softwood scrubs areas.

NP 767—Parish of Abbotsford (gazetted 21-12-79). The existing national park at Cape Cleveland was extended by 22 613 hectares. The park contains a wide range of landscape and vegetation types, including relatively high granite mountains, long sandy beaches, extensive littoral areas and one of the most valued wetland habitats of wildfowl in north-east Australia.

NP 233—Parish of Clonmel (gazetted 21-12-79). This national park is about 25 kilometres north-west of Monto and is renowned for its scenic walks. The addition of 675 hectares was formerly part of a state forest and is bounded in part by Three Moon Creek and features a portion of the Cania Gorge.

NP 255—Parish of Dryander (gazetted 26-1-80). A total of 1 015 hectares was added to this scenic park and included part of the former Paluma Holding and several islands that were vacant Crown Land or expired special leases. The park is regularly visited by boating enthusiasts.

NP 227—Parish of Conway (gazetted 26-1-80). An area of 2 284 hectares was added in this gazettal. The area involved had been subject to negotiation for several years and is part of a revoked state forest. The rainforest communities involved in this addition are of high scientific value.

NP 496—Parish of Roberts (gazetted 9-2-80). A total of 177 hectares in the parishes of Roberts, Kerry and Numinbah was added to the existing Lamington National Park. These additions provided the park with an area suitable for the provision of a camping area on the O'Reilly's (Green Mountain) side of the park and also with an area adjacent to the north-western boundary of the park which provides a focal point for people who wish to view the spectacular Cainbable Creek.

NP 226—Parish of Bellenden Ker (gazetted 15-3-80). While no new land was added to the Bellenden Ker Parks in this gazettal, the western boundary was defined for the first time since the park was originally gazetted in 1960.

NP 281—Parish of Broadwater (gazetted 15-3-80). The Girraween National Park was extended by about 200 hectares. The land involved is within Bald Rock Creek Valley which is close to two large camping areas and the recently-constructed visitor centre.

NP 686—Parish of Lacy (gazetted 29-3-80). An area of about 25.7 hectares of steep land was added to the existing park in the parish of Lacy. The added area provides for possible future road access and a picnic area.

Environmental parks

Six environmental parks were gazetted totalling over 3 314 hectares. These parks, detailed below, are all held under the trusteeship of the relevant local authority except for Tinana Island which, because of its educational and scientific value, has been placed under the trusteeship of the Director of the Queensland National Parks and Wildlife Service:

EP 1393—Parish of Knapp (gazetted 18-8-79). This environmental park, which is about 123 hectares in area, is situated about 39 kilometres south-east of Boonah. The park has been placed under the trusteeship of the Beaudesert Shire Council, and its landscape consists of high ridges and mountainous forest country intersected by small gullies.

EP 163—Parish of Carraba (gazetted 3-11-79). This park, which is situated about 20 kilometres south-west of Taroom, is an area of virgin brigalow and associated scrub which is representative of the natural ground cover of the region. It is about 45 hectares in area and has been placed under the trusteeship of the Taroom Shire Council.

EP 800—Parish of Coonambelah (gazetted 2-2-80). The park, which is approximately 2 920 hectares in area, is adjacent to the City of Townsville and is under the trusteeship of the Townsville City Council. It includes the area known as the Townsville Town Common and is a prime waterbird habitat.

EP 1338—Parish of Tinana (gazetted 29-3-80). This environmental park, approximately 1.03 hectares in area, covers Tinana Island which is in the Mary River on the outskirts of Maryborough. The vegetation of the island consists of dense river vine scrub, *livistonia* palms and fig trees surrounded by a thin margin of mangroves. Because of its educational, rather than recreational, value this park has been placed under the trusteeship of the Director of the Queensland National Parks and Wildlife Service.

EP 230—Parish of Port Kennedy (gazetted 10-5-80). This park, which is situated west of Hammond Island in the Torres Strait, is about 9.71 hectares in area and is surrounded by mud flats and rocky outcrops. The park encompasses most of Round Island and is generally steep and rocky with some forest vegetation. It is under the trusteeship of the Torres Shire Council.

EP 7—Parish of Uranna (gazetted 17-5-80). The park is situated about 40 kilometres west of Springsure on the Tambo-Springsure Road and is about 215.8 hectares in area. The park is bordered by two creeks separated by alluvial flats and is covered mostly with coolibah grassy woodland with large permanent waterholes that provide a valuable fauna habitat. The Bauhinia Shire Council is acting as trustee.

Fauna Sanctuaries

The following fauna sanctuaries were gazetted during the year:

Koonabulla FS—Parish of Bribie (gazetted 28-7-79). This fauna sanctuary is situated midway between Landsborough and Beerwah and is about 25 hectares in area. The land has permanent water, coastal forest, rainforest, open wallum country and grassland providing a haven for a wide variety of birdlife and various species of wallaby.

Gunnadoo FS—Parishes of Roma, Waldegrave (gazetted 28-7-79). Gunnadoo Fauna Sanctuary is situated about 5.6 kilometres south of Roma and is approximately 209 hectares in area. The area is of particular importance for the protection of bird life.

Charley Creek FS—Parish of Chinchilla (gazetted 28-7-79). The land over which this sanctuary is declared is owned by the Chinchilla Shire Council. It is approximately 113 hectares in area and supports large numbers of water birds.

Awoonga Dam FS—Parishes of Iweragh, O'Connell, Riverston, and Pemberton (gazetted 15-12-79). This sanctuary includes the storage area and adjacent wetlands created by Awoonga Dam. It is situated about 27 kilometres south of Gladstone and is about 1 960 hectares in area.

Texas Lagoon FS—Parish of Texas (gazetted 2-2-80). Texas Lagoon bisects the town of Texas and supports a large number and variety of birdlife. It is also reported to contain platypus. The sanctuary is 10.9 hectares in area.

Purchases during the financial year are presented below:

Portion	Parish	Purchase Price	Purpose
		\$	
Lot 2 on R.P. 34297	Hampden	323.55	National Park—Extension to The Leap
95	Broadwater	21,000.00	National Park—Extension to Girraween
130, 131, 12, 125, 124, 87, 57v, 70, 54v, sub. 1 of 48v, 49v, 59, 134 and 135 and 156, 191, 144, 192 and 130	Tenterfield Folkestone	58,500.00	National Park—Extension to Girraween
Lot 1 on R.P. 147527, subs. 1a and 2a of 22v, sub. 2 of 55v	Broadwater Tenterfield	72,000.00	National Park—Extension to Girraween
Allotments 1 to 5 of suburban section 6, allots. 1 to 4 of sub. sec. 7, allots. 1 to 4 of sub. sec. 8, and allots. 1 to 5 of sub. sec. 9, town of Noosa	Weyba	50,000.00	National Park—Extension to Noosa
Subs. 1 and 2 of 22v and sub. 1 of 29v	Gilbert	34,500.00	National Park—Extension to Scenic Rim
198	Folkestone	21,975.00	National Park—Extension to Girraween
81	Tenterfield	13,027.27 (part payment)	National Park—Extension to Girraween
50	Meunga	30,000.00	National Park—Extension to Edmund Kennedy
Part of 7v	Mingoola	55,000.00	National Park—Extension to Sundown
8v, 11v and 12v	Mingoola	50,000.00	National Park—Extension to Sundown
Lot 2 on R.P. 147527	Broadwater	8,000.00 (part payment)	National Park—Extension to Girraween
48 and 49	Meunga	81,600.00	National Park—Extension to Edmund Kennedy
Allots. 5 of sub. sec. 7, town of Noosa	Weyba	12,697.00	National Park—Extension to Noosa
Survey costs		29,326.66	
Legal fees		1,364.25	
	Total Expenditure	539,588.69	

By way of comparison, total purchases for preceeding years are as follows:

1975-76	1976-77	1977-78	1978-79
\$190,091	\$700,000	\$719,762	\$874,500
Including \$88,330 of Commonwealth funding	Including \$400,000 of Commonwealth funding	Including \$200,000 of Commonwealth funding	

National park estate

Type	Number	Area (hectares)
National parks	307	2 811 292
Environmental parks	82	38 094
Fauna reserves	3	30 227
Fauna refuges	1	105
Scientific purpose reserves	1	5 345

Total area of the national park estate is 2 885 063 hectares, representing 1.67% of the total area of Queensland.

In addition, there are 1 327 fauna sanctuaries in the State, covering a total area of 11 229 621 hectares.

Technical Services

The Technical Services Section operates as the educational, publicity, promotional, public relations and staff training arm of the Service. It is involved in the art of interpretation, which might be summarized as the communication of nature conservation ideals and practices, and it goes about this in many ways. The section is involved in display, production of a wide range of print material, including brochures and posters, film and audio visual presentation, drafting and mapping, library services, the conduct of guided walks and other interpretive exercises on national parks, liaison with natural history associations and honorary protectors and input to park management proposals. It also maintains close contact with other appropriate Government Departments and with organizations and individuals involved in the conservation movement.

Regional Interpretive Officers

The decision to appoint specialist officers, Mr Marc Hockings to Mackay and Mr Bill Carter to Townsville, will greatly enhance the Service's interpretive output in the northern regions of the State.

Little interpretive work has been undertaken in the region based on Mackay, and the first task was to make an assessment of immediate requirements for interpretive programmes on the national parks of the area. A start was also made in helping tourist resorts of the Whitsunday Islands to establish or improve their own interpretive programmes.

Interpretive planning

A regional interpretive plan was prepared during the year for the national parks in the granite and traprock region of south-eastern Queensland. The plan, the first of its kind in the State, was under review by senior officers as the year ended.

Interpretive training

A week-long course in basic park interpretation for park management staff was conducted at Binna Burra in the Lamington National Park in February and was quickly put into practical use by field staff on a number of parks over the Easter holiday period.

Interpretive programmes

During the year under review, interpretive programmes were held in holiday periods at several national parks including the Bunya Mountains, Lamington, Girraween, Tamborine and Cunningham's Gap. Activities included guided walks, film and slide shows, lectures, spotlighting of animals by night and programmes for junior rangers. The Service extends its appreciation to volunteers assisting in the projects and to local parks staff who helped and, in some cases, ran their own interpretive programmes for the public.

Second World Wilderness Congress

The Second World Wilderness Congress was held in Cairns in June, and the Queensland National Parks and Wildlife Service had strong representation. The Honourable the Minister for Culture, National Parks and Recreation presided over an open session and the Director delivered a paper on the management of Queensland Parks. Other speakers included Mr Peter Stanton, a senior botanist with the Service, who shared with the delegates his experiences of the Cape York wilderness, and Mr Bill Carter who spoke on interpretation of nature. (Mr Carter returned, during the year, from a Churchill Fellowship and published a comprehensive document on 'The volunteer's role in conservation'.)

The Honourable the Premier of Queensland was the keynote speaker at the final dinner.

During the period of the congress, Service staff staged a display and a series of lectures at the Crosswell Hall in Cairns, entertained visiting media representatives at the Mossman Gorge National Park and produced, for the delegates, a special publication outlining conservation policies and measures in Queensland. Media kits containing Service publications and a range of representative photographs of native animals and



Reconstructed 'Old Cedar Vale' Homestead, headquarters of Bunya Mountains N.H.A.

landforms were also placed in the Press Room for use by journalists covering the congress.

Natural History Associations

In Queensland, as in other parts of the world, the national park movement has owed much to the dedication and to the practical help which has been given to government management and interpretation of our park system by volunteers. Natural History Associations are just one example of this community involvement in nature conservation, and the Service is grateful for their contribution.

Binna Burra Natural History Association

The caves circuit self-guiding walk brochure was revised, and returns from its distribution increased from 50 to 80 per cent when a notice was placed on the honesty boxes explaining the aims and the non-profit nature of the association.

The association decided to appoint a full-time interpretive officer and the Service will assist by providing training.

Following the success of Bird Week at O'Reilly's Guest House, the profits of which were generously made over to the association, it was decided to introduce Tree Week. Mr Bill Whiteman of the Service and Mr Bill MacDonald of the State Herbarium lectured on the complexities of rainforests, and the week was so successful that it will be continued under the new title of Forest Week.

Bunya Mountains Natural History Association

The Director addressed a meeting of the association in June and, as a result, a better understanding arose as to the role of Natural History Associations and their links with the Service.

1979-80 was a busy year for the association members who conducted guided walks, week-end excursions and evening lectures, and started on the task of re-erecting on the Bunyas the original, 90-year-old Cedar Vale Cottage which was presented to the association.

Tamborine Mountain Natural History Association

The information centre in Doughty Park is now staffed seven days a week by association members who are offering a wide range of publications to the thousands of visitors passing through the centre.

Queensland's first national park was established at Witches Falls, Tamborine Mountain, in March, 1908, and the association celebrated the occasion with a National Parks Day.

Mount Nebo and Mount Glorious National History Association

Unfortunately, this association became inactive in the latter part of 1979 but, with further park development in the area and stimulus from other associations, it is hoped to see it rejuvenated in the near future since a nucleus of enthusiastic members still exists.

Lindeman Island Natural History Association

This was one of the two new Natural History Associations established during the year, the other being at Lake Broadwater, near Dalby.

The association owed its genesis to John Luscombe who was a driving force behind the establishment of the first Natural History Association at Lamington National Park. The Director presided over the first meeting of the new association in August.

Lake Broadwater Natural History Association

The Director also attended the inaugural meeting of the Lake Broadwater Natural History Association in May.

First priority for this new group was a start on a detailed survey of the interpretive potential of the park with particular reference to water birds and local vegetation.

Lectures and talks

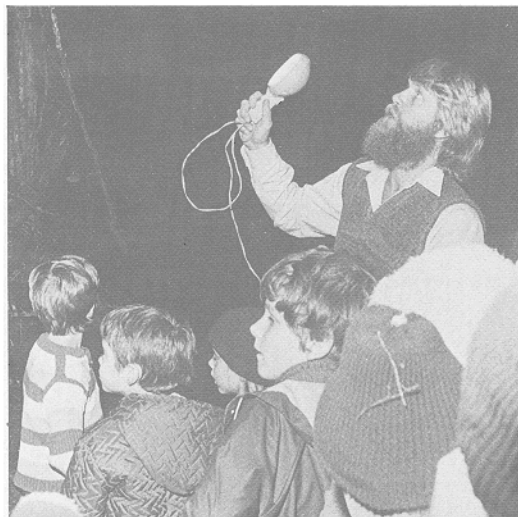
Reference has already been made to the participation by Service staff in the Second World Wilderness Congress in Cairns. In addition, members of the Technical Services Section addressed a wide range of special interest groups including youth organizations, students, teachers, sporting organizations, service clubs and environmental bodies. In several cases, films or audio visual presentations were used to illustrate the talks.

This particular duty is not one which solely concerns officers of the Technical Services Section, and I would like to express my gratitude to all members of the staff who have helped to promote the Service and nature conservation principles in this way, frequently outside normal working hours.

Educational coach tours

The Service is appreciative of the sponsorship of Mobil Oil Australia Ltd which enabled 290 students and 55 teachers to undertake coach tours to national parks in the Brisbane region.

Spotlighting, an educational activity in a national park



Ten tours were undertaken and the students were asked to note human impact (or lack of it) on selected locations including national parks, forests, recreational parks, schoolyards and domestic backyards. The aim of the exercise was to put forward the concept of national parks as repositories of genetic diversity evolving with minimum disturbance by humans.

Junior Rangers

The Junior Ranger programme is designed to encourage children to enjoy and care for the natural environment, and some three thousand have now undertaken the special programmes to qualify as Junior Rangers.

A children's activity area was established at Tamborine Environmental Park as a contribution to the Year of the Child in 1979, the Service working in conjunction with the Beaudesert Shire Council, Queensland Agricultural College and local conservation groups. The park was officially opened by the Honourable the Minister for Culture, National Parks and Recreation.

During the year, Junior Ranger programmes were held at Mount Tamborine, Maiala, Bunya Mountains, Binna Burra and O'Reilly's, and this aspect of the Service activities is expected to be stepped up in 1980-81 following an overseas study of educational and interpretive techniques.



Learning about nature

Brisbane Wildlife Survey

A steering committee was established to conduct a wildlife survey of Brisbane, and the Queensland National Parks and Wildlife Service was one of the Government Departments to participate.

The survey was designed as a public participation programme aimed at stimulating interest in wildlife and its conservation, not only in Brisbane, but in the surrounding shires.

Several projects were launched as part of the survey including the compilation of lists of both easily identifiable species of plants and animals and of rare or particularly interesting species, a study of the ecological history of Brisbane, a topographical map exercise for students to designate various land uses and a study of the parks and creeks of Brisbane.

Photography and audio visual displays

A further eight thousand colour transparencies were added to the photographic library in the financial year, and a start was made on collating and extending a specific section dealing with all forms of land use. This material will be of inestimable value in assessing the impact of the various types of development on the environment.

Major photographic assignments during the year included visits to the new Lakefield National Park on Cape York Peninsula, Heron Island, southern Moreton Bay and the Cairns region.

Audio visual programmes were prepared on the central Queensland coast, Lakefield and the southern portion of Moreton Bay, and this form of education and promotion is increasingly being used in Service negotiations with local authorities and other groups.

The library of framed prints has been extended to some two hundred representations of animal life and land forms. Distribution will be increased to regional centres so that greater use can be made of display in conveying the conservation message.

Other Government Departments and commercial agencies have continued to make heavy demands on the photographic library for reproduction purposes, a demand which the Service is pleased to meet in the majority of cases.

It is expected that the new Service headquarters in the MLC Centre will provide valuable new facilities for the photographic unit, including a darkroom and special sound booth.

Provincial shows

The message of conservation was taken to a number of provincial centres throughout the year. The Service's display caravan was largely used, and centres visited included Toowoomba, Dalby, Warwick, Roma, St George, Gympie, Maryborough, Bundaberg, Charleville, Mount Isa, Townsville, Mackay, Mount Tamborine, Rainbow Beach and Brookvale Park, near Oakey.

For many country people, this participation gave them their first opportunity to make contact with the Service, and this is an area to which the Technical Services Section hopes to give more attention in the years ahead.

Displays

A special display was constructed for use in the new information centre which was officially opened at Carnarvon National Park in August, and the Service again participated in the RNA Show in Brisbane.

Film shows

The film library has been built up during the year and now comprises 38 productions including the excellent range of six films which were produced in the Australian Broadcasting Commission's 'Exploration North' series referred to in the last annual report. Thanks are due to the Commission for its valuable donation.

The films are used by Service officers in support of the conservation message.

Public information files

As a convenient point of reference for the public, the Service maintains, at its headquarters in Brisbane, a series of information files on the national park estate in Queensland. They are for consultation within the Service library only, and 132 were made use of during the year. The most requested files were those relating to Cooloola, Lamington, Fraser Island, Mount Glorious, Mount Barney, Blue Lake and Cunningham's Gap National Parks.

Honorary Protectors

The Service is grateful for the assistance it has again received from honorary protectors, particularly in the more remote and under-staffed regions of the State.

In some cases, the protectors carry heavy responsibility for policing protective measures, and others have made considerable contributions in the area of interpretation.

The problem of communication with and training for honorary protectors has by no means diminished, and this is an area which is causing the Service a great deal of concern. It would seem that only the appointment of additional Service staff will alleviate the difficulty and enable the protectors to realize their maximum potential.

Honorary protector appointments in the last year have been made only where the applicants have been recommended by field staff as helpful volunteers in their area. Appointments were:

June Elizabeth Tooke
Glen Wilfred Player
Leonard Brendon Boyce
Basil Edward Jackson
David William Royle
Stephen Mangold
Dawn Whyatt Frith
Clifford Brodie Frith
David McKeown
Hugh Lancelot Webb
Wayne James Plant
Brian Joseph Allom
Clement Patrick Donoghue
Ian Bruce Cameron
Patricia Ann George
Flavia Josephine Bull
Barbara Ann Finn
Glen Allan Miller
Lynton John Wright
William Bennett

June Violet Sylvia Cox
Patricia Florence Ritchie
Bernard Claud Sainsbury
Michael Walter Prior
Arthur Philip Anderson
Robert Douglas Eckel
Colin Davy
Gordon Barrie Sigley
Claude John McKnight
Cecil Beal Hughes
James Edward Willett
Milton John Douglas
Merle Elizabeth Douglas
John Matthew Woodward
Raymond John Hayes
Christopher John Tester
George Bernard Graham
Peter Cantarella
William Henry Cox

Artwork and graphics

Reference was made in the last annual report to the appointment of an illustrator, and full use has been made of this new service in the year reviewed.

Illustration in the form of graphics and cartoons has been introduced to many forms of print material and displays, including audio visual presentations, and has now been accepted as both an entertaining and educational means of communicating the conservation message.

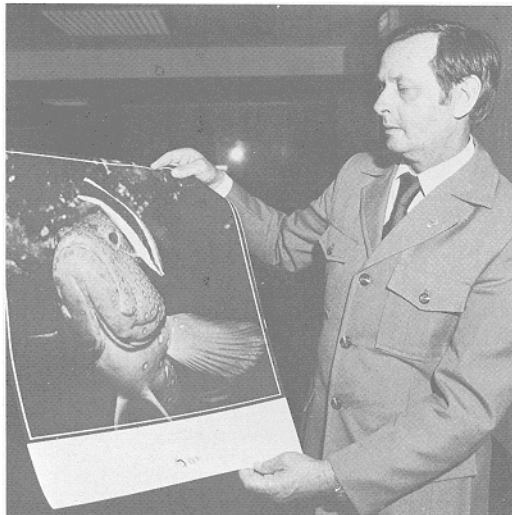
Production of brochures calls for a high degree of specialization in the graphics field, and the section is fortunate to have skilled staff capable of designing and taking material to finished art stage. The Service is also able to reproduce some of its own print material without recourse to outside sources, but this is necessarily limited to the more modest publications.

Publications

Public demand for information on parks and other environmental matters during the year was a further indication of increasing public interest in the natural world, and the Service is hard pressed to produce sufficient brochures, leaflets and posters.

A pictorial calendar based on animal habitats was produced with assistance from a paper manufacturing company and a firm of printers, and proved to be one of the most successful promotions of the year.

The Minister inspects a new Service poster



Further work was undertaken on the graphics manual which should be completed early next financial year. The manual will have a valuable role to play in consolidating progress which has already been made in design and presentation as part of the Service's campaign to establish a corporate image which will reflect its work in conservation and nature-based recreational activities.

The following publication programme has been undertaken during the year under review:

New publications

Fun Book	3 000
79/80 Camping Guide	50 000
1980 Calendar	2 000
Bunya Bulletin	3 000
Noosa Bird List	3 000
Woodgate Bird List	3 000
The Ranger Vol. 14, No. 1	400
Career Information	10 000
A brief look at Nature Conservation in Queensland	2 200
Sign Catalogue for Sign Manual	250
The Role of Queensland National Parks and Wildlife Service in Nature Conservation	3 000
The natural environment	10 000
Signs without words	40 000
Eungella National Park Information sheet	1 000
Tamborine Mountain Information sheet	3 000
Exploring Carnarvon Gorge	10 000
Lamington Park map	10 000
Lake Eacham	2 000
National Parks of Cape York Peninsula	15 000
Wildlife Legislation	1 500
Comb crested jacana poster	6 000
Ghost bat poster	6 000
Masked booby poster	6 000
Sand goanna poster	8 000
Signs poster	500
Whiptail wallaby poster	6 000
Cleaning relationship poster	6 000
Defensive relationships poster	6 000
Biogeographical Region poster	2 000
Nature Conservation Source Materials	10 000

Reprints

Girraween Bird List	3 000
Carnarvon Birds	6 000
Carnarvon National Park	10 000
Carnarvon Broadsheet	3 000
Carnarvon Rock Art	10 000
Exploring Royal Arch Cave	10 000
Lake Eacham	10 000
Chillagoe and Mungana Caves	10 000
Hinchinbrook Island	10 000
National Parks of Townsville Region	10 000
Walking at Girraween	10 000
Walking at Lamington (Binna Burra)	10 000
Walking at D'Aguilar Range	10 000
Walking at Lamington (Green Mountains)	10 000
Bunya Bunya Self Guiding Nature Walk	10 000
Araucaria Self Guiding Nature Walk	10 000
Cedar Block Self Guiding Nature Walk	10 000
Granite Arch Discovery Walk	10 000
Rainforest Self Guiding Nature Walk	10 000
National Parks of Southern Coastal Queensland	30 000
National Parks of Northern Coastal Queensland	18 000
Reptiles of Queensland poster	12 000
Waterbirds of Queensland poster	5 000
Possums of Queensland poster	5 000
Reptiles of Queensland cards	4 000
Possums of Queensland cards	4 000
Waterbirds of Queensland cards	4 000
Humans have a heart poster	2 800
Lamington Spiny Cray poster	6 000
Masked booby poster	5 000
Green ring-tailed possum poster	6 000
Whiptail wallaby poster	6 000
Platypus	10 000
Wildlife Legislation	2 000

Drafting and mapping

The appointment of an additional staff member to this area helped significantly to overcome an accumulation of work brought about by the significant increase in the national park estate.

The work flow will be further improved with the purchase of reprographic camera equipment.

Aerial photography was maintained at a high level and the Service was able to add significantly to its library of material, particularly in respect of environmental parks and parts of Cape York Peninsula.

Library

Reference was made in last year's annual report to the appointment of a librarian, and considerable progress has been made in 1979/80 toward the establishment of a totally new classification system.

By the end of the year, there were some 2 500 volumes in the headquarters library and an unknown number in 51 separate field collections established in various parts of the State—regional offices, research centres, national parks, etc. As time and resources become available, it is intended to fully catalogue the field collections and to produce a procedure manual for library use in the larger centres outside Brisbane.

A visit was paid by library staff during the year to the Townsville regional office of the Service and, following an assessment of the existing library and of future needs, it is hoped that a part-time library assistant will be appointed next financial year.

Articles on the correct use of the library have been included in the Service's staff magazine and, next financial year, it is hoped to establish a series of classes on the subject.

With growing use of the library, staffing remains a problem and this is an area to which the Service hopes to give attention next year.

Environmental studies sheets

A series of environmental studies sheets was prepared for use by school groups visiting national parks, and the response has been most encouraging.

University student research project in a national park





Management and Operations



Wildlife

Weather and Conditions

The inordinately dry conditions in many parts of the State reduced surface water and pasture growth, and the resultant competition between domestic animals and wildlife in a number of areas affected the population of some native species.

In south-western regions, graziers were compelled to cut mulga scrub as a feed supplement for domestic livestock, and the drought brought death to significant numbers of kangaroos in the Eromanga, Quilpie, Hungerford, Eulo, Mitchell, Adavale and Charleville areas. In some cases, the movement and breeding patterns of wildlife were affected by seasonal conditions, a case in point being the pelican which tended to migrate eastwards to available water.

Although all regions reported rainfall below normal levels, conditions in some areas did show an improved weather pattern over previous years and, in such cases, wildlife benefited from the increase in water and feed.

Staffing

The number of Wildlife Rangers throughout the State remained at nine, stationed in the Brisbane, Toowoomba, Charleville, Rockhampton, Mackay, Townsville, Mount Isa and Cairns districts.

Wildlife Rangers made regular patrols of their regions, and, during the year, inspections included visits to Cape York Peninsula, Michaelmas Cay, South Percy Island, the Injune/Roma area, Hughenden, the central-western districts, Warwick/Stanthorpe, the Simpson Desert, Stradbroke and Moreton Islands, and Maryvale Station, near Charters Towers.

Field work is vital to the safeguarding of the State's wildlife, but an increasing percentage of Rangers' time is now being taken up in direct service to the public in the form of advice on cosmetic urban problems of individual animals which are sick, injured, or which are perceived to be a threat or a nuisance in an urban environment. The need for the Service to provide this type of assistance to the public necessarily curtails Ranger activity in other areas such as contact with rural landholders and assistance in countering illegal activities which are a threat to wildlife. However, the appointment of three cadets and additional clerical staff should enable the Wildlife Rangers to make greater practical use of their specialized knowledge of nature conservation.

During the year, Rangers assisted Service research staff on a number of projects, and contributions were also made to draft legislation on plant protection.

As funds become available, it is hoped that Service accommodation will be able to be provided for the Ranger stationed at Mount Isa who currently operates out of his own home and that an official vehicle will be allocated to the Ranger at Toowoomba.

Cadet Training

Three cadets joined the Wildlife Section of the Service after graduating from the Associate Diploma Course in Rural Techniques (Wilderness, Reserves and Wildlife) at Queensland Agricultural College, Lawes. One was posted to Charleville and has already gained valuable experience in kangaroo harvesting and management. The others have been stationed in Brisbane where they have been engaged on administrative work relating to the issue of Open Season Fauna Permits and kangaroo tags, giving field assistance to Wildlife Rangers and the Police Fauna Squad and in wildlife management programmes, including those associated with the rare bridled nail-tailed wallaby and the Queensland hairy-nosed wombat. The cadets also participated in prescribed burning exercises at Noosa National Park and helped Wildlife Rangers at Cairns, Townsville, Rockhampton and Charleville during the open seasons on duck, quail and snipe.

Extension

The Service continued its programme of lectures on wildlife legislation to cadets at the Police Academy at Oxley, in Brisbane, and similar talks were given to officers in a number of Government Departments including Primary Industries, Harbours and Marine, and Forestry, as well as to other appropriate personnel within the National Parks and Wildlife Service. The conservation message was given further circulation through talks to special interest groups such as avicultural and wildlife societies, honorary protectors, students, sporting shooters and associations and conservation organizations and, as in previous years, the Service Wildlife Rangers assisted in the production of educational and documentary films on wildlife and nature conservation subjects, including a feature by the Australian Broadcasting Commission on the illegal trade in wildlife.

Sport Hunting

Open seasons were declared for the usual six species of duck—black, maned, grass whistling, water whistling, white-eyed and grey teal; two species of quail—stubble and brown, and two species of snipe—Japanese and Chinese. There was an increase in the number of permits issued in the year under review, but bag limits were set at previous levels and hunting pressures did not have an adverse effect on bird populations.

Most of the permits were issued for the Townsville and Rockhampton regions and there was a decrease in both the Cairns and Mackay districts, largely due to staff shortages producing inadequate field surveillance. Only two permits were issued in the south-west of the State, where drought created unsuitable conditions for waterfowl.

An important condition under which permits are issued requires shooters to advise the Service of the number and species of duck taken, and it is a matter for concern that few complied in the year now reviewed. This is a matter which the Service will be taking under review in the future, since acceptable conservation depends upon the co-operation of permit holders.

Kangaroo Industry

Kangaroos are harvested in Queensland for commercial purposes under a strict system of annual quotas set by the Commonwealth Government, and only those species which are in no way endangered are permitted to be taken.

The harvesting is policed by Queensland National Parks and Wildlife Service and carcass sales can be effected only through licensed dealers who are required to submit monthly returns on the number and types of kangaroo carcasses purchased.

Shooters are required to take out an open season fauna permit, and the number of animals which they are permitted to take is controlled through the issue of kangaroo tags which must be affixed to each carcass before it can be accepted by the licensed dealers.

In the year under review, there was a marked increase in population density of the open season species, particularly the red and grey kangaroo and the wallaroo, leading to extensive damage to some areas of primary production and a consequent lifting of the harvesting quota to 1 500 000.

Towards the end of 1979, the market for the red and grey kangaroo, the whiptail wallaby and the wallaroo was extremely buoyant, and skin prices reached high levels. However, early in 1980, the market collapsed and, but for a limited demand for kangaroo meat, the industry would have suffered major disruption.

A large number of licensed shooters operated in the south-western region of the State during the year, and some were given approval under the Fauna Conservation Regulations to store skins and/or carcasses in privately-operated chillers before removal to a licensed dealers premises. The move cut repetitive travelling costs and will make the industry more profitable.



Deer farming, a growing industry for Queensland

There is provision outside the normal quota system for the Service to issue crop damage permits to landholders who are experiencing particular problems with kangaroo populations, and a number of applications were processed from farmers and graziers invaded by animals driven from their normal territories in search of feed and water.

A problem area for the Service and for the industry generally has been the administrative workload imposed by the applications for kangaroo tags. Delays have occurred in the issue of tags and effective control of the industry has sometimes suffered. The Service hopes to overcome this difficulty as the staff situation improves.

Deer Farming

The interest in deer farming continues to grow and, provided that sound markets can be established for venison and other products, such as velvet, a useful industry could emerge. Capital and expertise is now being attracted and the heightened interest by the commercial sector has added to the duties and responsibilities of Wildlife Rangers who are increasingly spending time dealing with inquiries, inspecting properties and traps, checking the numbers of deer taken and methods of capture, as well as seeking to police interstate smuggling attempts of breeding stock.

Forty-three permits to take and farm deer were issued during the year but, of the 2 656 animals for which permits were granted, only about fifty per cent were actually captured.

To help the public understand the implications of this emerging industry, the Service issued a new edition of its publication 'Red Deer Farming in Queensland'.

A particular point which the Service is anxious to make is that deer are exotic animals and that their spread in the wild should not be permitted. Close liaison is maintained with the Queensland Deer Breeders' Association and with the Department of Primary Industries and, since deer have been declared stock under the Stock Acts, any movement must have prior approval of both the National Parks and Wildlife Service and the Department of Primary Industries. Deer farming is presently not permitted outside the feral range of the animal.

Butterfly farming

Two farms have been licensed to keep, breed, sell and display butterflies—one at Mount Tamborine in southern Queensland and the other on the Atherton Tableland, west of Cairns. The species being farmed, Cairns Birdwing (*Ornithoptera priamus euphorion*) and Ulysses (*Papilio ulysses josea*), have been gazetted protected fauna, the only species of insect protected by fauna legislation in Queensland.

Crocodile farming

Applied Ecology Pty Ltd continued its crocodile farming project at the Edward River in north Queensland, where stock is intended for eventual marketing.

Aviculture

The Service is now enjoying an excellent relationship with aviculturists following changes to Government policy and a clearer appreciation by aviculturists of the responsibilities of Wildlife Rangers in this area.

Service officers have attended meetings of avicultural societies, held informal discussions with members and contributed articles to magazines serving this particular interest.

Aviculturists have welcomed the introduction of the Fauna Record Book in place of aviary registration, but some cases of falsified entry have been detected and the Service will be monitoring this aspect closely in the future.

During the year, the Government agreed to a change of policy which permitted aviculturists to import into Queensland native birds which can be found in the wild within the State and which are not threatened or endangered in their wild state.

A number of aviaries were inspected, and it was apparent that most aviculturists were operating within the legislation with only a few minor breaches being recorded. However, the poaching of birds from the wild continued, particularly in the south-eastern region, and the Service renewed its appeal to aviculturists and to the public to help to stamp out illegal trapping and dealing.

Zoos

During the year, 35 premises within the State were exhibiting fauna to the public and it was a matter of some concern to the Queensland National Parks and Wildlife Service that, in a number of cases, animals were being maintained in unsuitable conditions.

Since its inception, the Service has sought to improve zoo standards, and public opinion is now coming round to a greater appreciation of the need to upgrade the conditions under which animals are housed and displayed. Pressure from this source would appear to be more likely to yield satisfactory results than the use of regulations.

Some zoos did make considerable improvements to their existing facilities and others announced major reconstruction projects, perhaps the most interesting development during the year being the construction of breeding aviaries at the Currumbin Sanctuary on the Gold Coast.

The programme was accomplished through a grant from the Utah Development Company and will enable the study of the biology of native parrots and comparative studies of parrot genera, particularly their breeding requirements.

Satisfactory breeding results were achieved in a number of zoos throughout the State, species including the wombat, red-tailed black cockatoo, Major Mitchell cockatoo, powerful owl, children's python, water dragon, taipan and the rufous rat-kangaroo.

Scientific collection and research

The Service continued to maintain strict control over applications for permits to collect native animals in Queensland. The requests came from local, interstate and international scientists pursuing laboratory studies or studies of animals in their natural habitats.

Although a good deal of valuable information can be obtained from studies of this nature, the Queensland National Parks and Wildlife Service is ever mindful of species protection and, in the interests of wildlife conservation, a number of applications were refused. Over the 12-month period, 73 permits were issued.

The bird-banding scheme implemented by the CSIRO continued to attract enthusiasts and scientists wishing to band birds in Queensland, but permits were issued only to those holding the appropriate authority from the Organization. No reports on banding activities successfully completed were submitted to the Service and, whilst this is not a strict requirement of permit, the information could be of use in wildlife management.

Crops and personal damage

The Service carries the authority to issue permits to farmers and graziers requiring to take protected native fauna which is causing injury or crop damage, and this authority has also been extended to selected organizations in the case of certain common species.

Widespread dry conditions during the year tended to concentrate native animals onto crops and pastures and, as a result, the Service received an increased demand for permits. Eighty-four applications were granted, mainly in respect of cockatoos, galahs, kangaroos, wallabies and deer, although other fauna taken under the permit system included coots, lorikeets, rosellas and crows.

A further 91 permits were issued, mainly in the Brisbane region, for the taking of magpies following attacks on humans in the bird breeding season.

Goats on South Percy Island

Following reports of massive damage by herds of goats to vegetation on South Percy Island National Park, the Queensland National Parks and Wildlife Service mounted a successful eradication programme. Under a closely-monitored expedition, Service officers from the Wildlife Management Section, Parks and Reserves Section and Research and Planning Branch reduced the numbers of this feral animal on this island park.

The Service has also instituted a programme to monitor vegetation changes on the island and, during the year, a bird survey was undertaken.

Mount Moffatt Survey

Data was collected by the Service on the vegetation of the Mount Moffatt National Park in the Central Queensland Highlands as part of an inquiry into the diversity of plant communities in the area.

Species Report

Bridled nail-tailed wallaby (*Onychogalea frenata*)

Biological research continued into this endangered species on Taunton Station, near Dingo, in Central Queensland.

Acquisition of the property was completed in the previous financial year, and interim management techniques have been aimed at improving habitat quality by excluding domestic stock. The year under review has seen a renewal of certain sections of fencing and the establishment of fire breaks.

Queensland hairy-nosed wombat (*Lasiorninus barnardi*)

Epping Forest is a national park which was established for the specific purpose of protecting the Queensland hairy-nosed wombat, which has come close to the verge of extinction.

Its position is still precarious and only a few have been sighted by the Service over the past year, although there is evidence of small pockets of active burrows.

Fencing of the park, so as to exclude domestic animals, commenced and the Service will continue to study means of preserving this rare animal for future generations.

40-Mile Scrub National Park

The effect of cattle grazing and the feeding habits of native animals are important factors in nature conservation, and the Queensland National Parks and Wildlife Service has conducted enclosure trials at the 40-Mile Scrub National Park, west of Mount Garnet, to study the effects of grazing by cattle and wallabies.

Data has also been collected on road kills on the highway bisecting the reserve, and the census will continue in 1980-81.

Tern mortality, Michaelmas Cay

In August-September, reports were received of large numbers of dead terns being found on Michaelmas Cay in north Queensland waters. Inspections by Service officers revealed significant mortalities of sooty terns (*Sterna fuscata*) and common noddies (*Anous stolidus*) but, although autopsies were performed, no cause of death was revealed.

About 80 per cent of the adult and sub-adult birds of both species died, and large numbers of eggs were deserted.

A survey of the cay also revealed significant erosion and inundation of the vegetated zone by seawater.

Crocodile sightings

There were 15 reports of crocodile sightings in northern coastal rivers and streams close to inhabited areas, and Service officers were involved in moving the animals to other locations away from human habitation.

Fauna notes

Large numbers of magpie larks (*Grallina cyanoleuca*) and spice finch (*Lonchura punctulata*) were reported throughout the city of Townsville and, in Brisbane, there was a significant increase in the number of crows towards the end of 1979.

The crows evoked a number of complaints from residents, and the Queensland National Parks and Wildlife Service is closely watching research which is being conducted in the United Kingdom to control crow populations under management systems.

Rainbow and scaly-breasted lorikeets appeared to be fewer in number, but the reduction may be only a short-term fluctuation since eucalypts and other food trees had a fairly poor flowering season in 1979.

Open season waterfowl were reported in abundance at several water reserves in the south-western region, but some of the larger lakes, such as the Dynevor Lakes in the Thargomindah area, ran almost dry and no breeding was recorded over the year.

At Coolmunda Dam, near Inglewood, tens of thousands of grey teal were sighted in February and a new species of skink was discovered on South Percy Island. The Queensland Museum determined that it belonged to the genus *Ctenotus*.

Swamp hens posed something of a problem by moving onto the track at the Gold Coast Turf Club, but the erection of a one-metre fence between the track and the adjacent wetlands appears to have overcome the difficulty.

Thousands of fruit bats visited the colony at Indooroopilly Island in the Brisbane River in 1979, the population of one species, little red, (*Pteropus scapulatus*) being estimated at a quarter of a million. Other species were the grey-headed (*Pteropus poliocephalus*) and the black (*Pteropus alecto*). After a short stay, the flock of little reds abandoned the colony in February–March, 1979, probably in search of another food source, and were not seen again up to the end of the financial year. The other two species remained until the winter and they returned to the colony in early September. Habits were monitored and capture techniques were evolved to assist the Currumbin Sanctuary flying fox extension programme.

A possum management programme has been initiated by the Service for the use of Brisbane residents, and records indicate that as many as 60 possums per week are being captured and relocated. In one case, a Paddington resident collected 18 possums from her roof during one trapping period.

Two specimens of the lung fish (*Neoceratodus forsteri*) were recorded on the surface of the upper reaches of the Brisbane River, near Fernvale. The lung fish is a protected species and is confined to only a few rivers and dams in south-eastern Queensland.

Service officers were again involved in many incidents involving sick, injured, orphaned or nuisance animals, and those released into the wild included a 1.5 metre saltwater crocodile, a one-metre freshwater crocodile, 11 adult emus, 16 grey kangaroos, more than 50 brush-tailed possums, two black-headed pythons, six scrub pythons, five echidnas and numerous birds.

A black-headed python found in Charleville would appear to be far beyond the acknowledged distribution area of the species.

More than 40 fork-tailed kites were found dead or dying near the sewage works and rubbish dump at Mount Isa. Lack of water, an inability to fly, poisoning from eating plant material and, in one case, snake-bite were factors involved.

Feral Animals

The feral pig (*Sus scrofa*) was abundant in the western sector of the south-eastern region of the State and numbers were thought to be the highest for several years. Signs of the animal were also detected on Indooroopilly Island in Brisbane, and a pig shooting exercise on Hinchinbrook Island yielded 26 animals. By the end of the financial year, it appeared that only one adult animal and a litter remained on this hitherto pig-free island national park.

The use of feral animals as a source of food began during the year, with one company processing feral pigs in abattoirs located in Brisbane and Toowoomba. Overseas exports of processed meat are expected to be developed in the near future.

The feral cat is widely distributed throughout the State, including the larger off-shore islands, and one specimen collected in the Simpson Desert was found to weigh 12 kilograms.

Law Enforcement

The protection of Queensland's fauna and flora has long been of concern to the Government, and the Police Fauna Protection Squad has again had a busy and eventful year.

The squad, comprising a Detective Sergeant, First Class, and a Detective Senior Constable, is seconded to the Queensland National Parks and Wildlife Service and works under Service direction although remaining under the control of the Commissioner of Police.

In the year now reviewed, more than 1 700 birds, seven mammals, 62 reptiles, 18 deer heads, skins and capes, 2 020 kangaroo skins and 12 possum skins were seized, along with 32 rifles and shotguns, eight nets, traps and cages, ammunition and sundry other equipment. Forty-one cases were prosecuted and fines, penalties and royalties amounted to more than \$28,000. In addition, 40 warning letters were sent to offenders and, at the end of the year, 23 cases were still pending.

The squad is equipped with two long-wheel base, four-wheel drive vehicles, two-way radio and long-range receiver, and it works closely with the Service Wildlife Rangers who actively gather intelligence in respect of breaches of the Fauna Conservation Act and Regulations and the movements of known and suspected trappers and illegal dealers. Squad members also maintain a close working relationship with other appropriate Government Departments and with fauna authorities throughout Australia, and an important part of their work is to address various organizations having an interest in nature conservation.

The completion during the year of facilities for holding seized fauna has been of great assistance to the squad, since it has enabled the officers to retain vital evidence for court cases. The care and management of all seized fauna is undertaken by two skilled animal attendants, but deaths cannot always be prevented since some animals arrive in poor condition. However, in cases where serious disease is suspected, autopsies are carried out so that any preventative measures which might be necessary can be implemented without delay.

Management Planning Section

The Service made good progress in the year in what is, throughout Australia, a relatively new field in management of the national park estate.

Section officers attended a number of important meetings including a workshop organized by the South Australian National Parks Service and a seminar arranged by the Education Department of Tasmania on recreational land use.

It is evident from contact with other State bodies that the Queensland approach to management planning is soundly based, particularly in the opportunity which it gives for public involvement at the very outset of the planning process and with respect to the liaison which the Queensland National Parks and Wildlife Service has built up with other Government Departments.

Projects

Coolool National Park

As the year ended, the draft management plan for the Coolool National Park was being amended as a result of public submissions and meetings and Ministerial review.

Six hundred and sixty public submissions, including about five hundred identical representations from members of four-wheel drive vehicles, were lodged by the public, and Service representatives also attended public meetings at Nambour, Gympie and Rainbow Beach.

After the period for public comment on the plans had closed, the Honourable the Minister for Culture, National Parks and Recreation, together with members of his Parliamentary committee inspected the park in company with the Service director and staff members.

Girraween/Sundown National Parks

The Service continued with the preparation of a management plan which will embrace three separate parks on the Queensland/New South Wales border—Girraween and Sundown National Parks and Horan's Gorge Environmental Park, all of which are in the Stanthorpe region.

The plan is being prepared in three sections—a regional plan and separate plans for the granite and traprock parks—and will take account of community feeling, including the 42 submissions which were made by members of the public in 1979.

Management planning for Sundown has been complicated by tin mining interest in areas sought for addition to the park.

The Central Highlands

Further studies have been made during the year to carry forward management planning for the national park estate in the Central highlands, and a management statement is expected to be prepared towards the end of 1980. This will include policies for both nature conservation and recreational use and cover such subjects as the grazing of domestic stock and park access.

Green Island

The Green Island Management Committee, which was set up last year to prepare a management plan for Green Island and its reef, submitted its report to Cabinet.

The committee, which met five times during the year to discuss the future use, management and development of Green Island and its reef, initiated investigations into the island's groundwater resources, water supply and sewerage systems and tourism matters which required more detailed consideration before they could be effectively resolved. The Great Barrier Reef Marine Park Authority commissioned consultants to undertake an economic evaluation of tourism based on Green Island and its reef, and the results were taken into consideration by the committee in selecting preferred tourism strategies.

Following these more detailed investigations, the committee prepared a management plan setting out long-term objectives and guidelines which took into account the views of all organizations and individuals likely to be involved in implementing the recommendations.

The Scenic Rim

Work is proceeding on an investigation of all national parks and environmental parks in and near the Scenic Rim, the crest of the mountain ranges between Mount Mistake and The Head on Main Range and along the McPherson Range to the coast. The Scenic Rim region embraces some of the most popular and intensively used parks in southern Queensland, including Lamington, Springbrook, Tamborine Mountain, Natural Bridge, Burleigh Heads, Mount Barney and Cunningham's Gap National Parks.

A dossier on the 15 national parks and 10 environmental parks located in the Scenic Rim region was under preparation as the year ended. A planning team to oversee the exercise had been appointed, and a work programme will soon be devised for the overall management plan.

The initial stages of this project have been quite far-reaching. Preliminary discussions have been held with bushwalking clubs and other interested organizations, including the Lamington Natural History Association and the Joint Tourist Committee for Boonah, Beaudesert and Moreton Shires. The Department of Forestry has nominated a liaison officer to assist with the Scenic Rim exercise, and the Department and the Service have agreed to co-ordinate planning efforts in this region. Meetings have been held with the New South Wales Forestry Commission and the Queensland National Parks and Wildlife Service on co-ordination of management practices and policies, and a composite map has been prepared showing existing national parks and forestry reserves together with national park proposals. Assistance was given to students from the School of Australian Environmental Studies, Griffith University, who conducted a visitor survey at Binna Burra, Lamington National Park, over Easter. Field investigations of the recreational impact on particular parks within the Scenic Rim region have also been conducted.

During the year, Mount Barney National Park emerged as an area requiring more detailed consideration. Following discussions with the Queensland Federation of Bush Walking Clubs and a report submitted by Rathdowney Area Development Association on problems relating to the management of this park, an internal report was prepared recommending solutions to some of the more serious issues facing the Service in managing this important wilderness area. This report is still being considered within the Service.

The coming year should see considerable progress in the Scenic Rim management planning exercise. Consultation with the public and interested organizations on the best future use, management and development of the parks in the Scenic Rim region will be a vital part of this planning exercise.

Saint Helena Island

Saint Helena Island National Park, the first national park in Queensland to be set aside solely for its historical significance, was gazetted in October, 1979. Two special leases have been issued over the park—a 2.3 hectare lease for tourist purposes located on the island's western foreshore and a lease of 72.5 hectares over the remainder of the national park for grazing and conducted tours of the historical ruins. Under the lease conditions, the lessee is responsible for maintaining and preserving the historical ruins on Saint Helena Island, and the Minister for Culture, National Parks and Recreation has appointed a management committee to advise him on maintenance and preservation of the ruins and all matters affecting management of the park. The Saint Helena Island Management Committee consists of representatives of the Queensland National Parks and Wildlife Service, the Department of Culture, National Parks and Recreation, the Lands Department and the lessee. It is expected that other organizations with relevant expertise will be co-opted from time to time.

The management committee met three times during the year, and issues considered included ways and means of protecting the mangroves, noxious weed control, protection of the fabric of the prison ruins, legal restrictions on visitor access within the park, geomorphology of the island and surrounding marine environment, the relevance of the Australia ICOMOS (International Council on Monuments and Sites) 'Guidelines for the Conservation of Places of Cultural Significance', the possible restoration of the island's tramway system and the feasibility of establishing a field study centre.

A management plan for the park is being prepared and will include provisions for preserving and restoring historical structures on the island, interpreting the island's history and environment to the public, and providing facilities to enable the public to enjoy the park's attractions. The plan should be completed within two years.

Statutory planning

During the year, the section, in conjunction with Technical Administration Section, has continued to prepare comments on draft statutory town-planning schemes. Submissions to the Local Government Department have been prepared for draft schemes for the Shires of Cook, Cardwell, Mareeba and Noosa in a programme designed to encourage co-operation between the Service and the Local Government Department in statutory planning.

Aboriginal relics

Investigation of Aboriginal relic sites located on national parks and areas of national park interest has continued with financial and technical assistance from the Australian Institute of Aboriginal Studies and the Institute of Applied Social Research at Griffith University.

While this work is only in its early stages, some interesting and important results are emerging. It appears that the art extends over a far greater area than originally believed. There is also a greater understanding of the extent of the deterioration of sites as a result of natural erosions, human agency and the effect of stock licking rock surfaces, apparently in an endeavour to compensate for mineral deficiencies in their normal diets.

The co-operation of local landholders has assisted greatly in this work.

Conondale Range National Parks

A position paper on the two Conondale Range National Parks was prepared for a public field week-end organized by the Forestry Department at Sunday Creek Forest Station in December. The paper presented information on the resources and use of the parks and proposals for their future development and management.

Obituary

The section lost the services of Mr Gordon Harworth whose dedication to the Aboriginal site recording programme made a major contribution to this important aspect of Service responsibility.

Submission to Grants Commission

A detailed submission was made through the Queensland Treasury to the Commonwealth Grants Commission for the six-State relativity review into existing tax-sharing arrangements among States.

This submission, for the category of national parks and wildlife, centred on presenting a methodology to determine the relativity of the States in providing a similar level of nature conservation and recreation services.

It was suggested that any tax relativity review by the Commission should be based on the fundamental principles and objectives of the national park system and of wildlife management. This entailed recognizing that:

- the functions of the national park system are to preserve the nation's natural heritage through conservation, and to provide for nature-based recreation;



Preparing a sign—the silent communicator

- the task of nature conservation is to conserve the complete range of natural landscapes, and plant and animal communities.

Using the CSIRO survey of Australian biophysical regions as a comparative technique, in conjunction with a comparison among States of specific ecological aspects, it was demonstrated that Queensland has a substantially larger range of environmental and ecological diversity than any other State, and that severe disabilities relating to dispersion and environmental factors are faced in Queensland in managing parks and wildlife in remote areas such as Cape York, where 54% of the State's national park area occurs.

The submission argued that the allocation of funds should be weighted to take account of Queensland's special position.

Central Queensland Coast

A major study into nature conservation priorities in relation to sand mining and other land uses from Baffle Creek, north of Bundaberg, to Shoalwater Bay, north of Rockhampton was completed and forwarded to the mining industry.

Some compromises were suggested and early response has been encouraging.

A system of both national and environmental parks has been proposed to conserve the environmental and ecological diversity that extends for 300 km along this part of the Queensland coast. Such a system would also be significant in meeting future recreation demands from South-East Queensland, the expanding industrial city of Gladstone and other central Queensland centres.

In the study, five major locations were identified as having particularly high nature conservation value—Deepwater, Eurimbula, Rodds Peninsula, Curtis Island and Bayfield.

Jumpinpin Southport Broadwater

A conservation planning study was commenced in conjunction with the Queensland Fisheries Service into the Jumpinpin Southport Broadwater region to determine a conservation strategy.

The study focuses on consolidating the findings of an earlier (1974) Government report on long-term planning of the area between Jumpinpin bar and the Nerang River Bridge.

The study area includes South Stradbroke Island, the islands within the Jumpinpin complex and adjacent mainland areas, and is the premier recreational estuary in Queensland. It also contains a wide diversity of vegetation types and extensive wetland habitat areas.

International Year of the Child Environmental Issues Sub-Committee

The Environmental Issues Sub-Committee of the Queensland State Planning Committee for International Year of the Child maintained its involvement in projects which would benefit children during and beyond 1979.

Some of the projects which received special IYC funding included the promotion and development of environmental activities for Girl Guides, environmental information sheets produced by the Queensland Conservation Council, and the Brisbane Wildlife Survey organized by the Wildlife Preservation Society.

Other projects proceeded without special funding. The Education Department's 'What a Child Can Do' project entered its second and third stages. This major project throughout Queensland's primary schools and pre-school centres sought to encourage children to explore and understand their physical and social environment. Follow-up kits of environmental brochures, posters and other material were forwarded to those Queensland primary schools and pre-school centres which submitted completed projects from the first stage. Finally, an 'ambassador kit', a mosaic of the materials provided by school children throughout the project, was submitted to UNESCO.

International Year of the Child projects organized by the Service during the year included the preparation of the 'Fun Book', a book of environmental games, stories and puzzles for young children, the development of the North Tamborine Environmental Park Children's Activity Area and the RNA Show display. The Service also provided for the 'What A Child Can Do' follow-up kit a 'Nature Songs' record, the 'Fun Book', posters and postcards, and assisted the National Trust of Queensland with its proposal to develop a living history farm at Bellevue Homestead, Coominya.

Parks and Reserves Section

Public demand for recreational facilities in national parks has continued to increase and, although the Service responded as best it could, financial constraints were a limiting factor in the year under review.

The national park estate in Queensland is ever growing and poses a number of management problems which are taxing the ingenuity of Service staff. New areas in Cape York Peninsula and the Central Highlands are receiving considerable attention from Service management specialists, and the declaration by the Commonwealth Government of the Capricornia section of the Great Barrier Reef Marine Park has posed a number of challenges in the formulation of zoning and day-to-day management strategies for the overall marine park as it relates to the adjacent terrestrial national park resource under Service control.

Section officers have had valuable liaison with visiting specialists working in similar fields overseas and they have attended conferences, seminars and workshops dealing with a wide range of problems and challenges facing park managers. One of the most notable of these was a workshop symposium held in Canberra to discuss the management of wilderness areas. Subjects included definition of wilderness, appropriate legislation and land classification systems for wilderness and the need to limit recreational facilities in a wilderness situation.

Special leases on national parks

Special leases for recreational purposes are granted only in exceptional cases and after the Service is totally satisfied that the facility will not irrevocably detract from the park's overall nature conservation value.

Stringent conditions are applied to the granting of any such lease, including a requirement that proposed improvements are subjected to a detailed impact investigation and are approved by the Service before implementation.

In 1979-80, only two special leases were granted, both over a total area of nearly 75 hectares on Saint Helena Island National Park, near Brisbane. The leases, which were based on leasing rights which existed before the park was gazetted, were issued for grazing and for the conduct of a tourist concession associated with the historic penal ruins on the island.

An innovative move during the year was the setting of fundamental guidelines in respect of a proposed lease for a kiosk at Lake Eacham National Park on the Atherton Tableland. The Service conducted a detailed study on the nature and extent of the proposed development and put forward detailed guidelines and general concepts before the calling of tenders, while still allowing prospective developers considerable scope in design. The matter had not been finalized by the end of the financial year.

Helping the handicapped

The Service plans to play a key role in the Year of the Handicapped in 1981 and, in May 1980, employed two overseas consultants to prepare a blueprint on the type and range of facilities required by handicapped people wishing to enjoy national park facilities.

Six national parks and two environmental parks were under consideration at the end of the financial year for developmental programmes designed to accommodate the handicapped.

Weeds in Parks

Weeds present a serious ecological problem on Queensland's national parks and, following a proposal from the Service's Research and Planning Branch, a weed infestation inventory was established.

A key to the new system is consistency in the data collected, and the programme will be on-going with the intention of implementing an effective eradication programme in all parks.

Control burning

Fire can pose a major danger to the national park estate, and the use of control burning techniques is becoming increasingly important in meeting the threat.

The cutting of fire breaks in conjunction with control burning of flash points, such as areas around camping and picnic grounds, has been Service policy in the more fire-prone parks for some years. Extreme care is taken to minimize the effect of such burns on the environment by burning infrequently and only in the cooler months and there is continuing research into the effects of wild fires and the various control burning strategies open to the Service. Perhaps of particular interest is the research undertaken during the year into the ecologically fragile Cooloola National Park, a study which could point the way to fire management programmes for other parks.

Since fire control is an essential part of any park management plan, the Service has sought to involve members of the public and outside agencies in this aspect of its work, and a good example of this community effort has been the establishment of the Magnetic Island Fire Committee. Queensland Government Departments, the local authority, residents' associations and individual residents are pooling ideas in an effort to prepare a comprehensive fire plan, and input from the local conservation group should help the Service to ensure that ecological aspects are fully considered.

Environmental Parks

Environmental parks are designed to protect areas of land which may not meet the criteria for national park status but which have local or regional environmental significance.

They cover a wide variety of landscapes and habitats ranging from lagoons, rocky outcrops and waterfalls to patches of wildflowers, rainforest and melaleuca swamp.

It is a system of nature conservation which is attracting increasing interest from local authorities, many of which accept trusteeship of such parks within their boundaries and undertake to protect and maintain them under the guidance and control of the National Parks and Wildlife Service.

Six new parks were gazetted during the year, the most significant being the Townsville Town Common which was established under the trusteeship of the Townsville City Council. The Town Common is renowned for its large waterfowl populations and a landscape which includes dunal, saltpan, sedge-swamp, freshwater lagoon, open woodland and rainforest habitats. In June 1980, the inaugural meeting of the Town Common Environmental Park Management Committee, comprising Service and local authority representatives, was held in Townsville to begin its task of studying the resources and formulating guidelines for successful park management.

To relieve pressure on the Environmental Parks Officer based in Brisbane, the Service appointed a regional officer in Cairns and the section staff was further complemented by assigning a cadet ranger to environmental park duties.

As reported in the last annual report, a ranger-overseer was appointed to the proposed Lake Broadwater Environmental Park and, during the year now reviewed, the accommodation there was upgraded. Work also commenced to overcome siltation problems in the Neck area by removing spoil and using it to restore and extend the public recreation area. The Service contracted the Wambo Shire Council to undertake the silt control project, and other initiatives included the putting down of a bore to supply water to public facilities and to the resident ranger's house.

The Lake Broadwater Natural History Association held its inaugural meeting in May and became the first association of its kind in the State to have its headquarters based on an environmental park.

Work continued during the year on the development of a tourist road to provide access to scenic points of the plateau of the Mount Zamia Environmental Park, near Springsure. The first completed portion of the road and a shelter shed at Fred Creek Gorge were officially opened in November by the Honourable the Minister for Culture, National Parks and Recreation as part of the Bauhinia Shire Council's centenary celebrations.

Wings over Townsville Town Common Environmental Park





Parks for the people

A shelter shed serving a very different purpose was completed in November at Lark Quarry, a 300 hectare park some 120 kilometres south-west of Winton. The Queensland National Parks and Wildlife Service engaged a Brisbane firm of consultant architects to design and supervise the construction of a structure to protect a unique dinosaur trackway from atmospheric conditions. The shed, built at a cost of \$40,000, is the first step toward preserving a feature of international palaeontological significance, and work is proceeding on the design of an internal walkway which will allow visitors to see and photograph the trackway without the risk of damage to the fragile rock surface.

Another major project to be completed was the access road to Mount Beau Brummel Environmental Park. The work was undertaken by the Moreton Shire Council with funds provided by the Queensland National Parks and Wildlife Service, and students from the Agricultural College at Lawes began to plan a track system for this attractive park which protects a section of the Little Liverpool Range, near Laidley.

College students are also becoming involved in the expansion and upgrading of facilities in the North Tamborine Environmental Park children's activity area, developed in 1979 using voluntary labour. The first section of the activity area was officially opened by the Honourable the Minister in December as part of the Service's contribution to the International Year of the Child.

Radio communication

An expansion of Service operations into the more remote areas of the State has compounded communication problems which the Service is seeking to overcome by extending its radio network. Several additional high frequency radios were purchased during the year for use by Wildlife Rangers, research and planning field staff, and Service personnel stationed in the more distant parks.

To cope with the increase in this radio traffic, particularly in north Queensland, the Service plans to establish a new base station at the Northern Regional Centre at Pallarenda, Townsville. The radios will be connected to a caretaker's residence for 24-hour emergency call service, and it is expected that the new facility will be shared by the Harbours and Marine Department on the basis that the Queensland National Parks and Wildlife Service will have access to the Harbours and Marine Department's base station at Lytton.

In the immediate future, the base station at Hermitage, near Warwick, will continue to serve radios operating in southern Queensland but, eventually, the station will be raised to the same standard as that proposed for Pallarenda.

In addition to the High Frequency facilities, the Service purchased 30 used Very High Frequency transceivers from the Forestry Department for short range communication between or within parks to increase Service efficiency in dealing with fire-fighting operations, emergency situations and the many problems which can arise when the parks are under heavy visitation.

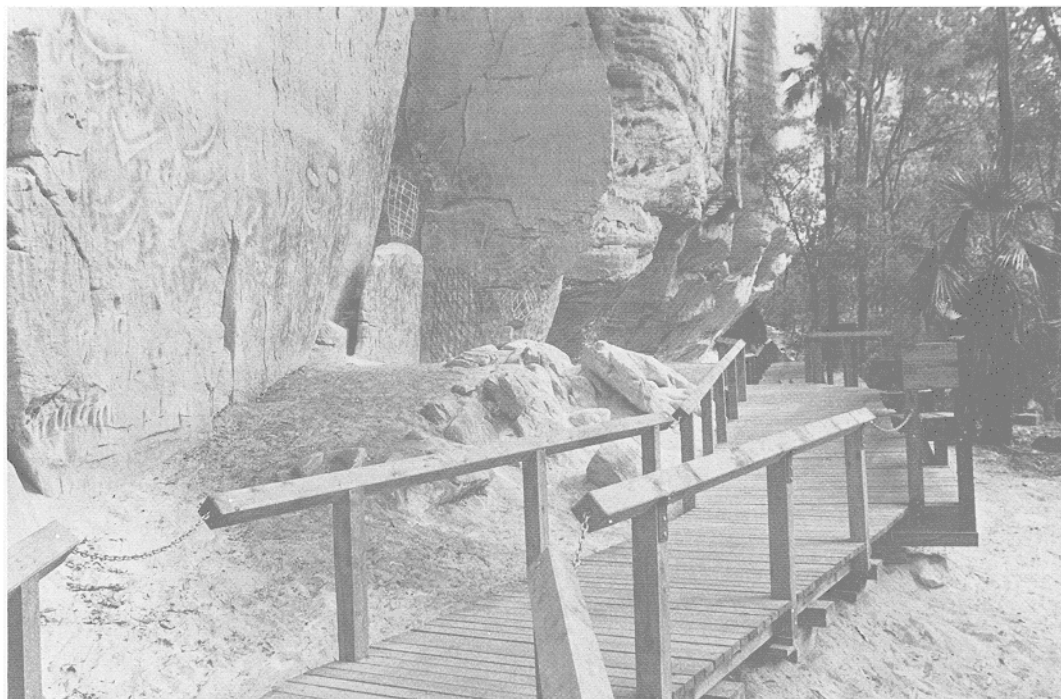
The regional structure

Regionalization of park management and administration has produced considerable benefits for the Service, as well as improving public access to specialized guidance and advice on a wide range of conservation matters.

Brisbane region

Staff resources have been stretched to the limit to establish, maintain and protect national park facilities in the heavily-populated south-eastern region of the State. In some parks, saturation point has been reached and the Service is faced with the problem of regulating visitor numbers.

Heavy usage of national parks tends to encourage vandalism, and there have been some major breaches of park regulations, particularly on parks which are not constantly staffed. In a bid to counter the threat to such areas, the Service has stepped up patrols by staff from nearby parks.



Boardwalks at Carnarvon National Park

During the year, a new camping ground and amenities block were provided within the Lamington National Park at Green Mountains, and the local authority sealed the last section of the access road. Further joint Service/local authority roadworks are planned for the area.

Work commenced on the new Egg Rock camping ground in the Binna Burra area of the park and, eventually, it will be connected to the existing track system in the park.

Facilities were improved at the Natural Bridge National Park in the Gold Coast hinterland and premises acquired for conversion to a visitor information centre.

Plans were prepared for the construction of an amenities block and a track for the use of handicapped people visiting Springbrook National Park, and future visitation will be monitored to assess the use of the new facilities and their suitability for the handicapped.

Extensive work was carried out at Maijala National Park. Further walking tracks were put down, and picnic and parking facilities were improved.

The camping area at Girraween National Park was re-located to allow the former site to regenerate after heavy public usage. A ballot system was introduced during the year so that the number of campers could be regulated in peak periods.

A new vessel 'Cormorant' was added to the Service fleet and enabled regional staff to increase patrols to Moreton and South Stradbroke Islands.

Saint Helena Island was gazetted a national park and an overseer was appointed. Facilities for the public and for Service staff are planned, but all development, including preservation of the island's historical sites, will be subject to determination by the Saint Helena Island Management Planning Committee.

An interpretive training school was held at Binna Burra for regional park staff, and regional officers have continued to play an important role in the Junior Ranger programme.

Gympie/Maryborough Region

Emphasis was placed during the year on the development and maintenance of facilities on Cooloolool and Great Sandy (Fraser Island) National Parks.

The opening of the Freshwater Lake camping area at Cooloolool to conventional drive vehicles resulted in greatly increased numbers of park visitors, and the Service had to restrict camper numbers over the Easter break.

Other work at Freshwater included a new picnic area and the construction of three kilometres of a walking track system. Work also started on new staff accommodation.

The Sir Thomas Hiley Information Centre at the southern end of Cooloolool, facing Kinabala Island, has been a great success with the public, and the displays and boardwalks are playing an important role in conservation education.

Great Sandy National Park on Fraser Island suffered some damage as a result of Cyclone Simon but public facilities escaped unharmed. Two camping grounds providing showers, toilets and staff accommodation are now fully operational and receiving heavy public usage. A third camping ground at Wathumba Creek on the western side of the park has been planned, and construction is expected to start in the near future.

Commonwealth funding has assisted greatly in developing facilities on Fraser Island, but this ceased at the end of the financial year and all future costs will have to be met by the Queensland National Parks and Wildlife Service according to regional priorities.

Several kilometres of walking track at Noosa National Park required upgrading due to heavy usage, and a visitor contact station was established at the entrance with the happy result that breaches of park regulations have now been reduced to minor proportions.

Construction work started on a new camping ground and associated amenities at Woodgate National Park, and the posting of a resident overseer to the park has substantially reduced previous management problems.

Crows Nest Falls National Park was closed for some six weeks early in 1980 due to the drought and high fire danger, and staff took advantage of the opportunity to construct a new walking track and carry out maintenance work.

Camping facilities at Bunya Mountains National Park were again hard pressed to cope with holiday pressures, although poor weather helped to ease the usual Easter congestion. The Junior Rangers programme on this park continues in popularity, and the Service appreciates the assistance given in park interpretive programmes by the local Natural History Association.

Staff were involved in lectures to local authorities, schools and special interest groups and, during the Christmas holiday period, the Service display caravan attracted considerable interest at Rainbow Beach. It also helped to convey the conservation message at a number of shows within the region.

Rockhampton Region

An important project during the year was the construction of a system of board walks at the Art Gallery, one of the principal Aboriginal art sites of the Carnarvon National Park. The walks enable visitors to see this priceless cultural heritage from a convenient distance but provide a buffer against vandalism which, regrettably, has occurred in the past. The system is to be extended to the Cathedral Cave, another important Aboriginal site upstream from the Art Gallery.

A resident overseer has been appointed to the recently-gazetted Mount Moffat sector of Carnarvon National Park, and headquarters have been established at the Mount Moffat homestead.

A major workshop/store shed was constructed at Seaforth and other parks within the region were upgraded by the provision of picnic tables, fireplaces and other amenities.

Island national parks, particularly those in the Whitsunday and Capricorn groups, continued to receive heavy visitation, and the Service mounted regular patrols to conduct maintenance and public relations exercises.

A new vessel 'Curlew II' was stationed at Shute Harbour, and tenders were called for a new patrol boat which will be stationed at Yeppoon.

Cairns Region

Management planning began for the newly-gazetted Lakefield National Park on Cape York Peninsula, and resident staff were posted there to help cope with heavy visitation and the problem of feral animals.

Lakefield poses considerable management difficulties. It is isolated from the rest of the region during the wet season when food supplies have to be taken in by air and the only means of communication is by radio.

New amenities blocks were constructed at Millstream Falls and Tully Gorge National Parks; car park and water supply facilities were provided at Josephine Falls; walking tracks were put down through the Barron Gorge National Park and work started on a Service office at Lake Eacham.

Extensive board walks were constructed in the Edmund Kennedy National Park in time for use by delegates attending the 2nd World Wilderness Congress at Cairns in June. Picnic areas were also provided within the park.

Service residences at Josephine Falls and Palmerston National Parks were extended.

At Missionary Bay, on Hinchinbrook Island National Park, the existing system of board walks was extended and the Service undertook development work to make the Chillagoe Caves more accessible to visitors. The programme includes new walkways, lighting and audio systems in the Trezkin Cave, re-design of walkways in the Donna Cave and a new amenities block at Royal Arch Cave. Parking facilities were also provided at the Donna and Trezkin Caves, and future plans for the area include a steel-framed walkway system which should be completed at the Trezkin Cave by December, 1980.



Ranger welcomes campers in a national park

Construction of a regional visitor information centre at Cardwell was well into the planning stage by the end of the financial year, and the Service appreciates the co-operation it has received from the Cardwell Shire Council.

Regional staff have maintained contact with local authorities, schools and special interest groups, and interpretive activities have continued, including the production of local brochures on environmental matters.

Vandalism in parks, particularly in the Townsville, Davies Creek and Ravenshoe areas, continued to create problems for the Service, although there was a marked reduction in damage to the environment at Lake Eacham following the appointment of resident local staff.

Appreciation is expressed to student groups and to 3 RAR, Lavarack Barracks, for voluntary help in the provision and maintenance of various facilities.



Research and Planning



The Research and Planning Branch of the Queensland National Parks and Wildlife Service has made a number of important contributions to nature conservation in the year under review.

Branch staff are based in Brisbane, Cairns, Townsville, Rockhampton and at Hermitage, near Warwick, and field studies are conducted in all parts of the State.

Service expertise in the fields of research and planning is sought by many outside organizations, some of which are willing to contribute financially to studies. Grants from the Australian National Parks and Wildlife Service have assisted with the State's turtle research programme and with a fauna survey of the McIlwraith Range on Cape York Peninsula. The Australian Orchid Foundation helped to fund a Service search for new species of orchids on Cape York, and a major grant from the World Wildlife Fund was most helpful in enabling the appointment, on a temporary basis, of a research officer to undertake studies on Raine Island. Raine Island is a small, historic island off the north Queensland coast and is a major seabird rookery and one of the most important sea turtle nesting sites in the world. Unfortunately, the funding for this particular project ceased during the year under review but the Service is hopeful that an offer by the Meakers Charities Trust to take up the financial support will meet Cabinet guidelines. As the year drew to a close, the Service received the welcome advice that the Australian National Parks and Wildlife Service would be continuing its financial support of the turtle project in 1980-81.

International environmental conference

The Branch Director, Dr H. J. Lavery, attended the UNESCO's first international conference on the environment—"Methods and Strategies for Integrated Development"—held in Belgium in September. Representatives of 75 countries attended and Dr Lavery was elected to the conference's nine-man Bureau of Presidents and delivered a major paper as well as convening one of the principal sessions. The Branch Director also held discussions on nature conservation in England and attended the 55th annual conference of the American Association of Zoological Parks and Aquariums in St Louis, Missouri. He also inspected major zoos in Singapore, the United Kingdom and the United States.

Zoo study

In May, Dr Lavery was appointed by Cabinet as chairman of a State Zoo Study team to report on the concept and feasibility of a statutory zoo, representative of the State. At this stage, a multi-campus, natural presentation of the extensive wildlife of Queensland is envisaged should the zoo project proceed.

The Branch Director continued to serve as a member of the board of management of Currumbin Bird Sanctuary, the Commonwealth/State Executive Panel in respect of the Burdekin River project, the Forest Research Station Committee of the Brisbane River Committee and the Queensland Institute of Technology's Biology Department Advisory Committee. He also served as an Honorary Associate of the University of New England.

Mr J. P. Stanton represented the Service on an inter-departmental committee which is investigating future land use in Timber Reserve 165, which includes the lands between Cooktown and the Daintree River.

Mr C. J. Limpus attended the World Conference on Sea Turtle Conservation in Washington in the United States and presented a paper on the status of sea turtles in Australia.

Dr P. S. Lavarack attended an international conference on endangered plants held in Cambridge in the United Kingdom.

Field Studies

An important Service activity is the investigation of specific conservation problems, particularly those which relate to species which are considered to need special attention if their survival in Queensland is to be assured.

Crocodiles

A freshwater crocodile research programme at the Lynd River in north Queensland has now been under way for four years. Work is carried out during August and September and, again, during December of each year. During the August-September period, 218 crocodiles were seen and, of the 132 captured, 69 had been previously tagged. In December, 119 newly-hatched crocodiles were marked.

A substantial increase in tourist fishing and tin mining activity has occurred along this river, and the likely impact on the crocodile population will be closely monitored.

Cave Bat Research

A survey of several cave bat breeding colonies was undertaken. It revealed that some caves are used as breeding sites for females because of their need for warm, sheltered roosts, whereas other sites are used only as roosts. These findings have an important bearing on bat conservation measures.

Kangaroos

Research has commenced on the bridled nail-tailed wallaby *O. frenata* on location at 'Taunton'. The area inhabited by these wallabies has been mapped and an effort is being made to capture and collar specimens for ecological studies.

Possums

The Herbert River ringtail possum which has been selected as the Service symbol, is now under intensive study. Two races of this possum have been described *Pseudocheirus herbertensis herbertensis* (Collett) and a sub-species *Pseudocheirus herbertensis cinereus* (Tate)—are being maintained in captivity at the research centre in Townsville, and two females have given birth to young. Information derived from the study will be helpful in formulating a conservation programme. Other unusual possums are being kept in captivity as a means of studying their reproduction and life cycles, and a survey of possums in the rainforest regions between Cooktown and Townsville has been extended to a number of new sites, one of which will be selected for an intensive study programme.

Queensland hairy-nosed wombat. Scientific study for survival



Sea Turtles

Extensive nesting of green turtles *Chelonia mydas* (L.) occurred throughout the eastern Australian rookeries and supported a long-held view that massive fluctuations in annual breeding numbers do not reflect actual changes in total population levels.

Long-term monitoring of population changes has been in progress at Mon Repos near Bundaberg for 12 years and Raine Island and Heron Island for 6 years. A total of 3 824 new taggings of three species of nesting sea turtles was recorded, and 196 recaptures were made of turtles returning to nest from previous seasons. A record number of 53 308 hatchlings were marked and released at Mon Repos and Heron Island.

An invaluable contribution to this research was made by the student and teacher volunteers who worked with Service officers.

Land Use Planning

The section has again had a busy year in its on-going programme of evaluating the natural resources of the State, defining areas suitable for national parks and other reserves and studying park proposals made by outside organizations and individuals.

The botanical section of the Wide Bay/Burnett Regional Resources Study has been completed and work has started on the zoological portion.

A major task currently before the section is the mapping of the natural resources of the wet tropical lowlands between Cairns and Ingham.

Data bank

The Service maintains a data bank into which is fed a wide range of information and specimens, most of which originates from field collecting exercises.

The branch assists in the identification of fauna specimens, but the volume of data now being produced, together with increased understanding and improved methodology in the survey field, indicate an urgent need for the introduction of computerization.

The kangaroo harvest monitoring programme has proved difficult to manage because of the amount of data now available, and an approach has been made to the Reserve Bank for assistance with funding which would permit the employment of a biometrician to handle not only this aspect of the Service commitment, but other research and survey work. However, the programme will be dependent on the availability of a suitable computer terminal for use by the branch, and Service officers are now consulting with others in an examination of the computer field as it might be applied to Service needs.

Surveys which have been completed or which were in progress at the end of the year included research into rainforest mammals between Townsville and Cooktown, herptofauna (reptiles and amphibians) of the Townsville district and orchids of the Cape York rainforest areas.

The year has also seen a study of the taxonomy and distribution of several specimens of bat.

Turtle research is important for nature conservation



Management research

Several research projects have been conducted during the year on Service management problems both on and outside national parks.

Park disturbance studies

The park acquisition programme and increasing use by the public have put the Service under heavy pressure to institute research and monitoring programmes.

The effects of grazing and fire on parks require close study, and the section is associated with a programme of fire management on Magnetic Island. Mapping of the island vegetation is in progress and results already indicate that the cycle of frequent fires has so modified the original vegetation as to produce a form that is now fire prone. Research is being conducted to devise a control burning programme which will break the cycle and, hopefully, restore the original vegetation patterns.

A programme to gather baseline vegetation data has commenced with the establishment, in conjunction with officers of Management and Operations Branch, of a number of permanent transects on Mount Moffatt and South Percy Island National Parks. The untimely death of Mr C. J. E. Bell, Botanist, early in 1980 delayed the programme, but it will be expanded with additional sites in 1980-81.

The bone seed daisy is a noxious weed which created a potential problem at Cooloola. The plant was used to stabilize the land after early sand mining operations at Rainbow Beach, and it took the combined efforts of the Queensland National Parks and Wildlife Service, other State agencies and local authorities to eliminate the problem.

Control burns

The Research and Planning Branch has participated in an inter-departmental committee responsible for control burning operations in the Cooloola area. It also gathered data during the year to monitor the effect of the first burn on the Noosa National Park for some 20 years.

Nature Reference Sites

Broadly, a nature reference site is an area of significant ecological interest where facilities are provided to allow intensive, long-term monitoring of the ecosystem. It provides a benchmark from which environmental differences can be measured as a means of helping in management policies. Such a site has been established by the Service at 'Mariala' in south-west Queensland.

Transects have been established to assist with regular monitoring of the region's fauna, and plans were completed during the year for the establishment of a number of vegetation monitoring sites to enable the Service to study the long-term effects of grazing by domestic stock and native herbivores. The study will proceed during the 1980-81 financial year.

Introduced animals

Earlier studies of red and fallow deer were valuable in building up knowledge of reproduction, and the emphasis is now being placed on ecological aspects. Deer are being trapped at a number of locations and ear-tagged for release and subsequent studies. As an aid to re-locating free-ranging individuals, experimental work began with radio telemetry equipment.

Publications

A number of special reports and publications were produced by Service officers during the year. They included:

- Covacevich, J. and McDonald, K. R. (1980). Two new species of skink from mid eastern Queensland rainforest. *Mem. Qd. Mus.* 20:95-100.
- Davies, M. and McDonald, K. R. (1979). A study of intra specific variation in the green tree frog *Litoria chloris* (Boulenger) (Hylidae). *Aust. Zool.* 20:347-359
- Davies, M. and McDonald, K. R. (1979). A new species of stream dwelling Hylid frog from northern Queensland. *Trans. Roy. Soc. Sth. Aust.* 3:347-359.
- Hodge, M., Lavarack, P. S., Bailey, R. and Leggett, R. A. Horticultural Guide to Australian Plants, Sets 5 and 6. A *Horticultural Guide to Australian Plants* (1979) 131 pp.
- James, J. W., Food of the powerful owl (*Ninox strenua*) in an area of south east Queensland. *Emu* (1980) 80:34-5.
- Johnson, P. M., Sex determination of the agile wallaby *M. agilis* (Gould) using adult skulls. *Qd. J. Agric. Anim. Sci.*
- Johnson, P. M., Observation of the behaviour of the rufous rat kangaroo (*A. rufescens* (Gray)) in captivity. *Aust. Wildl. Res.*
- Lavarack, P. S. *Sarcophilus moorei* (Reichb. f.) Schltr. The Orchadian 1979 6:70.
- Lavarack, P. S. (1980) Orchids of the McIlwraith Range. *Aust. Orchid Review.* 45 No. 2 pp 90-103.
- Lavarack, P. S. Wet season orchids of the Iron Range area. The Orchadian Vol. 6 No. 8 pp 171-173.
- Limpus, C. J. (1978):341-363. Toxicology of the venom of of subtropical Queensland Hydrophiidae. In *Toxins—Animal Plant and Microbial*. (Proc. 5th International Sympos.) Ed. P. Rosenberg.
- Limpus, C. J., Baker, V., and Miller, J. D. (1979). Movement induced mortality of loggerhead eggs. *Herpetologica* 35:335-338.
- Limpus, C. J., and Walter, D. G. (1980).The growth of immature green turtles *Chelonia mydas* under natural conditions. *Herpetologica* 36:162-165.
- Limpus, C. J. and Lyon, B. J. (1979). Two additional sea snake species from south Queensland. *Herpetofauna* 11:10-11.
- Searle, A. K., (1980) Fallow Deer in Queensland. *Qd. Agric. J.* 106 (2):119-24.
- Sharman, G. B., Murtagh Carolyn, E., Johnson, P. M., and Weaver, C. M. The Chromosomes of the rat kangaroo attributable to *Bettongia tropica* (Marsupialia:Macropodidae).
- Sharman, G. B., Murtagh, C. E., Johnson, P. M., and Weaver, C. M. (1980) The chromosomes of the rat kangaroo attributable to *Bettongia tropica* (Marsupialia:Macropodidae). *Aust. J. Zool.* 28:59-63.
- Speare, R. Johnson, P. M. and Haffenden, A. T., Management of disease in North Queensland macropods. Paper presented to the 1979 Summer scientific meeting of the Australian Mammal Society Inc.
- Rees, G. J. Caring for animals. For publication by the Education Department.
- Sheehy, P. Psittacosis. Published in the Queensland and Toowoomba Aviculture Journals.
- Carter, R. W. The volunteer's role in conservation.
- An important Service position paper, 'Freeloader or Friend?' was prepared and presented by the Deputy Director, Mr. C. W. Price, at the Local Government Association Conference at Mount Isa in September, 1979. It dealt with the relationship between the Service as a Government instrumentality and local authorities, and resolved many misunderstandings which previously existed.
- Additionally, Service officers provided material for numerous articles on nature conservation for publication in newspapers and magazines.



Appendix

Service growth since establishment

Staffing	1975-76	1976-77	1977-78	1978-79	1979-80
Salaried	87	95	96	119	134
Wages	44	102	122	138	164
Funding	\$	\$	\$	\$	\$
Revenue	1,676,838	2,383,553	3,056,310	3,602,213	4,427,758
Loan	477,982	999,715	1,399,998	1,998,507	1,600,000
Trust	121,178	528,153	404,464	290,282	257,046
Receipts	206,918	332,271	302,348	528,819	775,342

Scale of fees for Permits and Licences as at 30/6/80

	\$
For an open season fauna permit (personal use)	10.00
For an open season fauna permit (taking for sale)	30.00
Kangaroo and Wallaby tags (according to species)	.30 each
For a fauna dealer's licence	10.00
For registration of each fauna dealer premises—Class A	150.00
For registration of each fauna dealer premises—Class B	150.00
For registration of each fauna dealer premises—Class C	20.00
For registration of an aviary	10.00
For a permit to keep fauna under Part IX—not for exhibition	10.00
For a permit to keep fauna under Part IX—for exhibition by a person other than the Brisbane City Council or a Local Authority	300.00
For a permit to take fauna under Part IX	10.00
For a permit to remove fauna from any place in Queensland to another place or for a permit to move fauna from a place outside Queensland to any place in Queensland—Birds (including aviary birds interstate) per bird (minimum \$1.00)	.20
Other fauna	4.00

Permits, Licences, Certificates, and other Authorities issued under the Fauna Conservation Act 1974–1979

	1978–79	1979–80
Open Season Fauna Permit (Taking for Sale)	1 398	2 086
Open Season Fauna Permit (Personal Use)		
● Duck, Quail, Snipe	1 559	1 767
● Wallabies, Kangaroos	169	146
	1 728	1 913
1979 Open Season Fauna Tags (Kangaroos & Wallabies) (Calendar Year 1979)	756 100	1 350 000
Fauna Dealers Licence—Class A		
● Skin Dealers	30	33
● Skin/Carcass Dealers	17	27
● Chiller Sites	85	143
Fauna Dealers Licence—Class B	10	19
—Class C	108	145
Permit to keep fauna	584	695
Permit to take fauna	69	73
Permit to remove fauna	N/A	2506
Permit to import fauna	N/A	285
Permit to band fauna	23	26
Aviary registration	425	374
Crop damage permits	46	84
Magpie permits	100	91
Deer farming—permits to keep fauna	23	46
Deer farming—permits to take fauna	23	48
N/A Not available		
	\$	\$
Receipts		
Fauna permits (kangaroo, duck, snipe, quail)	78 293	107 600
Sale of tags (kangaroo)	358 450	530 337
Royalty	14 225	18 266
Permit to remove or import fauna	9 511	19 214
Permit to exhibit fauna	1 800	1 500
Permit to keep fauna	6 701	10 907
Fauna dealer class 'A' licence	24 955	28 700
Fauna dealer class 'B' and 'C' licence	13 081	7 167
Aviary registration	1 692	4 240
Payments in lieu of kangaroo tags when tags are unavailable		18 308
	508 748	746 199
Other Receipts		
Publications	1 755	794
Miscellaneous—Sale of maps, Grazing Permits, Permits (Scientific), Fines, and Rent, etc.	18 356	28 309
Total	528 819	775 342

Expenditure

Revenue Fund

		\$
Salaries		1,766,078
Contingencies—		
• Wages, Travelling Expenses, Maintenance and Incidentals	2,506,631	
• Cash Equivalent of Long Service Leave	5,049	2,511,680
Environmental parks and reserves	150,000	150,000
		<u>\$4,427,758</u>

Loan Fund

Capital Works and Development on national parks	800,000	
Capital Works and Development on Regional Centres	260,000	
Acquisition of national parks	540,000	
		<u>\$1,600,000</u>

Trust Funds

Commonwealth Grants for National Parks and Wildlife Services Fund—		
Acquisition, Research, Surveys, etc.		207,432
National Parks and Wildlife Service Grants Fund—		
Research, Development, etc.		49,614
		<u>\$257,046</u>

Trust Fund Expenditure for 1979–80

Research and Planning Branch

	\$
Orchid Survey of North Queensland	2,950
Queensland Sea Turtle Project	2,324
McIlwraith Range Survey	1,991
Raine Island Project	42,018
	<u>49,283</u>

Management and Operations Branch

Fraser Island Grant	184,415
Aboriginal Sites on National Parks	18,702
	<u>203,117</u>

Administration Branch

General Trust Fund	4,646
	<u>4,646</u>

Total 257,046

Development and Maintenance Works Programme 1979–80

Overall Distribution of expenditure was as follows:

Management Unit	Maintenance \$	Development \$
Management and Operations Branch (including Wildlife Section)		
Administrative and Operating Costs	415,521	162,411
National Parks		
Brisbane Region		
Lamington	63,187	59,760
Springbrook	31,764	7,812
Tamborine	37,102	3,488
Natural Bridge	12,645	23,174
Burleigh Heads	8,435	3,459
Mount Glorious	27,596	10,122
Mount French	1,033	94
Cunningham's Gap	20,407	5,367
Queen Mary Falls	13,226	769
Girraween	50,856	12,982
Regional Costs—not allocated to individual parks	14,317	11,484
Mount Barney Management Area	..	94
Sundown Management Area	29	375
Moreton Bay Management Area	94	51
Saint Helena	1,692	1,106
Total	\$282,383	\$140,137
Gympie Region		
Bunya Mountains	36,544	19,635
Crow's Nest and The Palms	13,975	13,384
Ravensbourne	10,289	2,081
Mapleton	8,792	6,140
Kondalilla	16,355	4,544
Noosa Heads	39,006	16,835
Cooloola	39,238	27,749
Fraser Island	11,075	..
Woodgate	6,414	5,976
Regional Costs—not allocated to individual parks	7,533	5,485
Woody Island Management Area	..	134
Kinaba	19,507	12,900
Total	\$208,728	\$114,863
Rockhampton Region		
Whitsunday Management Area (Island Parks Gloucester to Pentecost Island)	1,348	539
Conway	45,172	33,402
Cumberland/Newry Management Area (Island Parks Lindeman, Brampton and Newry Group)	1,306	38
Seaforth	39,553	20,039
Eungella	30,643	24,847
Cape Palmerston	46	..
Yeppoon and Islands	28,849	10,088
Heron Island (Heron Island, Capricorn and Bunker Group)	271	558
Carnarvon	61,286	46,526
Fitzroy Caves	18	..
Regional Cost—not allocated to individual parks	9,396	3,728
Eurimbula	9,400	3,740
Jim Crow Management Area	48	19
Total	\$227,336	\$143,524

Management Unit	Maintenance \$	Development \$
Cairns Region		
Chillagoe	41,645	54,095
Eacham	30,083	14,200
Barron	2,589	15,048
Green Island	853	325
Mount Spec	18,598	6,487
Palmerston	18,536	37,539
Jourama	18,680	3,665
Ravenshoe	1,283	142
Magnetic Island	17,618	514
Cardwell	29,463	25,397
Lizard Island	168	7,917
Regional Cost—not allocated to individual parks	32,394	17,133
Mount Elliot	18,103	7,535
Lakefield	24,776	35,555
Total	\$254,789	\$239,065
Management and Operations Branch Total	\$1,388,757	\$800,000
Regional Centres		
Brisbane		
• Head Office—Development of Photographic Services (Technical Service Section)	..	74,594
• Research Programme (Research and Planning Branch)	..	45,484
• Administration Development	..	6,806
Moggill (Minor Works)	..	10,730
Pallarenda (Townsville) Equipment, Landscaping and Development	..	116,696
Hermitage (Warwick) Equipment and minor works	..	1,650
Rockhampton (Regional Development)	..	2,201
Cairns (Regional Development)	..	2,039
		260,000
General Expenditure		
Administration		
Administrative and Operating costs	782,246	..
Cash equivalent of Long Service Leave	5,049	..
Technical Services		
Administrative and Operating costs	144,000	
Research and Planning		
Administrative and Operating costs	191,628	
Acquisition of National Parks		
Cost of land		508,898
Search and legal costs		31,102
		540,000
Total	\$2,511,680	\$1,600,000

