

Conservation in the State of Sarawak, Malaysia

by

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A. General Data:

1. Area of Sarawak: 48,342 square miles
2. Population: 744,529 (1960) 2.5 per cent increase per year 1947-60.

Principal racial groups	Population	Percentage of total population
Iban	237,741	31.9
Chinese	229,154	30.8
Malay	129,300	17.4
Land Dayak	57,619	7.7
Melanau	44,661	6.0
Other indigenous	37,931	5.1
Other Non-indigenous (Asian)	6,492	0.9
European	1,631	0.2
	<u>744,529</u>	<u>100.0</u>

3. Economy: largely dependent on primary products of which the most important are rubber, timber, pepper and sago.

B. Government departments and official organizations concerned with conservation:

1. Ministry of Agriculture and Forestry, (Kuching, Sarawak, Malaysia) has the overall responsibility for agricultural, forestry and conservation policy within the state.
2. Forest Department, (Kuching, Sarawak, Malaysia) is largely responsible for the implementation of the Wild Life Protection Ordinance and the National Parks Ordinance. Senior forest officers are appointed as game wardens and wardens of national parks. The Conservator of Forests is the appointed Chief Game Warden and until recently was the ex-officio Chairman, Board of Trustees, National Parks.
3. Board of Trustees, National Parks, (c/o Ministry of Agriculture and Forestry, Kuching, Sarawak, Malaysia) is responsible for control, management and maintenance of the national parks. The Board is at present being reconstituted.
4. Sarawak Museum (Kuching, Sarawak, Malaysia). The Curator, Sarawak Museum, takes an active interest in all conservation matters. He is a Game Warden and a member of the Board of Trustees, National Parks, and is also executive officer of the Turtles Board.
5. Turtles Board, (c/o Ministry of Agriculture and Forestry, Kuching, Sarawak, Malaysia) has the responsibility to control and operate the turtle industry in accordance with the Turtle Trust Ordinance.

C. Organizations concerned with research into conservation:

See B above.

D. Private conservation organizations:

Nil.

E. National Parks:

1. Board of Trustees, National Parks. The authority of the Board is laid down in the National Parks Ordinance. The Board makes recommendations to the Minister, Agriculture and Forestry, regarding the constitution of new parks. The constitution of new parks requires the approval of the Governor in Council. An objective of the recent Board of Trustees was to constitute a series of national parks which will include areas of all the principal primary vegetation communities that occur in Sarawak.
2. One national park (Bako National Park) has been constituted. Proposals to constitute a further nine parks have received the approval in principle of the Minister, Agriculture and Forestry, and constitution on some of these parks is proceeding. A list of all parks, constituted and proposed is attached as Annex 1.
3. No public information or interpretive services.
4. Training of park rangers is undertaken in Sarawak.
5. In the Bako National Park a bungalow and hostel are provided for visitors, and a second small bungalow reserved for visiting scientists. Similar facilities are proposed for some of the new parks.
6. Each park will be managed by a Park Warden (a forest officer appointed by the Minister, Agriculture and Forestry), and by a Board of Management, appointed by the Board of Trustees, National Parks. The principal emphasis is to preserve areas of primary vegetation and associated wild life and to provide recreational facilities in natural surroundings for the peoples of Sarawak.
7. The Bako National Park is, and the proposed parks will be, composed of areas of almost entirely primary vegetation, except in small localities where facilities are provided for visitors.
8. No commercial activity is permitted in parks, though rights for the removal of small amounts of forest produce from limited localities may be allowed.
9. Protection of the Bako National Park is entirely effective.
10. No exotic plants or animals are introduced.
11. Sarawak is in an early state of development as regards the constitution of national parks and the major problem is to persuade the people of the State of the need for conservation and for national parks.

No other comments.

F. Other Areas:

All areas for proposed parks are included in Annex I.

G. Forest Conservation:

1. Approximately 70 per cent of total land is under forest.
2. 24 per cent is forest reserve.
3. The objective of the forest reserves is primarily for productive forest.
4. Senior staff university training abroad leading to a degree in Forestry; junior staff training courses held in Sarawak.
5. Little problem of illegal clearing or logging at present though owing to pressure on the land it is likely to increase in the future.
6. Logging is carried out by private industry under license.

7. Forest Research Branch comprises three senior officers. Estimates for next five years have recently been approved under the Malaysian Development Program 1966-1970 and these should prove adequate. No additional staff required at present.

8. Reforestation:

- (a) Carried out by Forest Department staff.
- (b) By natural regeneration assisted by silvicultural treatment.
- (c) Not answered.
- (d) Silvicultural treatment at present is only undertaken in peat swamp forest approximately 80 per cent of the exploited permanent forest estate in this forest type is treated annually. There is little working at present in the permanent forest estate in the hills.
- (e) Native trees are used in reforestation. Exotics (principally pines) are being tried on a purely experimental scale.
- (f) A complete covering of trees will follow on any land that is logged whether silvicultural treatment is undertaken or not. The land is adequately protected.

9. Forest fires no problem.

H. Soil and Water Conservation:

With a relatively small population in Sarawak soil and water conservation has not been a major problem in the past. Some work is at present being done by the Agriculture Department and the Irrigation Branch of the Public Works Department. Erosion in areas under shifting cultivation can be severe.

I. Conservation of Wild Life:

1. Organizations responsible:

- (a) Forest Department
- (b) Sarawak Museum

There is no Game Department in Sarawak.

2. Protection of wild life is covered by the Wild Life Protection Ordinance (1958).
3. The law is not adequately enforced, mainly because most of the native races are living in relatively inaccessible areas where it is difficult or virtually impossible to control illicit killing of protected animals.
4. No specialized training in wild life protection is given.
5. No problem of wildlife control.
6. Provision is included in the Wild Life Protection Ordinance for the constitution of Wild Life Sanctuaries, but in fact no such sanctuaries have been constituted.
7. (a) Sarawak Museum is undertaking research projects on wild life, particularly on the orang-utan and other arboreal mammals. The ecology of bird life in primary forest is also being studied.
(b) No research division in the government is responsible for wildlife.
(c) Preliminary surveys should be undertaken in all proposed national parks, particularly the Gunong Mulu National Park, to determine the wild life population and its density.

J. Threatened Species of Animals and Plants:

1. (a) All the following animals and birds are protected by law:

Long-nosed monkey (<i>Nasalis larvatus</i>)	No immediate danger
Orang-utan (<i>Simia satyrus</i>)	Position desperate, work being undertaken.
Rhinoceros (<i>Rhinoceros sumatrensis</i>)	Virtually extinct

Reef egret (<i>Egretta sacra</i>)	No immediate danger
Cattle egret (<i>Bubulcus coromandus</i>)	" " "
Storm's stork (<i>Ciconia stormi</i>)	Rare, but little information.
Lesser adjutant stork (<i>Leptoptilos javanicus</i>)	" " " "
White-bellied sea eagle (<i>Haliastur leucogaster</i>)	No immediate danger
Gray-headed fishing eagle (<i>Ichthyophaga ichthyaetus</i>)	" " "
Black-naped tern (<i>Sterna sumatrana</i>)	" " "
Brown-winged tern (<i>Sterna anaetheta</i>)	" " "
Pied imperial pigeon (<i>Ducula bicolor</i>)	" " "
Green turtle (<i>Chelonia mydas</i>)	An international problem
Hawksbill turtle (<i>Eretmochalys imbricata</i>)	" " "
Leatherback turtle (<i>Dermochelys coriacea</i>)	" " "
(b) The following animals are not yet protected but nevertheless are threatened:	
Dugong (<i>Sirenia</i>)	Very rare on Sarawak coast, little information.
Wild ox (<i>Bos sondaicus</i>)	Very few herds are now in existence, pressure of population is destroying their natural habitat.
Niah cave gecko (<i>Cyrodactylus</i>)	Localized distribution confined to Niah limestone caves.
Cave earwigs (<i>Arixania esah</i>)	" " "
(c) The principal plants that are threatened with extinction occur on limestone hills. Many of these plants are endemic to particular hills. In addition certain orchids have a very localized distribution and are much sought after by collectors. Further information is required on both groups of plants.	
2. See notes after each species listed above – length of time threatened species is expected to survive.	
3. Measures to prevent extermination:	
(a) The problem is complex and varies with the different species. Legal protection by itself is quite inadequate if this protection cannot be enforced. It is considered that the constitution of a series of national parks, adequately patrolled, is likely to give protection to some of the threatened animals and birds on the above list and also to many species (such as the leaf monkeys, gibbons, lemurs, pheasants, and hornbills) which though not immediately threatened are likely to be so in the future. The establishment of these parks, and in particular the Gunong Mulu National Park should have priority in the overall scheme of conservation.	
(b) In certain cases, for instance that of the terns and storks, further measures should be taken to adequately protect the breeding grounds of birds.	
(c) The conservation of turtles and dugong (and dolphins) is a problem that can only be solved by international co-operation, and measures should be taken by international bodies interested in conservation.	
(d) The plight of the orang-utan is desperate and immediate measures in Borneo and Sumatra should be taken to ensure the survival of this species. Work is being undertaken now and Mrs. Barbara Harrisson will report on proposals for conservation.	

K. Pesticides

Pesticides are at present little problem in Sarawak. Sodium arsenate is used in silvi-cultural treatment by the Forest Department but its use is not considered to be dangerous to wildlife as it is only applied in peat swamp forest.

L. Public education or conservation:

1. Preliminary programs have been started.
2. Programs carried out by co-operation between the Sarawak Museum and Radio Malaysia, Sarawak.
3. A course on natural history, including conservation, is being prepared by the Schools' Broadcasting Section of Radio Malaysia, Sarawak, in co-operation with the Sarawak Museum.
4. See 3 above.
5. No private bodies interested in conservation.
6. Not applicable.
7. No texts available.

M. Training of conservation personnel

1. No training schools or other facilities.
2. No opportunity for advanced training.
3. In future some training of national park and possibly Game Department (if established) staff may be required.
4. See paragraph N below.

N. Urgent Conservation Problems:

The most urgent conservation problems are:

1. Conservation of orang-utan. Mr. and Mrs. T.H. Harrison are the experts on this subject and Mrs. Barbara Harrison will submit a report to the Working Group.
2. The constitution of the proposed national parks. This is largely an internal problem concerning the Ministry of Agriculture and Forestry, the Board of Trustees National Parks and the Forest Department. International assistance would be of value in providing strong support for the program. When the Gunong Mulu National Park is constituted it would be of the greatest value to have the assistance of a qualified wild life expert to survey the wild life in the park to determine the species representation and its approximate density within the park.
3. Full implementation of the provisions of the Wild Life Protection Ordinance. The establishment of a Game Department in Sarawak is a first necessity.
4. International co-operation on the protection of turtles.

ANNEX I

National Parks in Sarawak, Malaysia

A. Constituted:

1. Bako National Park

Established 1st May, 1957, with extension 1st January, 1960.

Location: Situated on a peninsula at the mouth of the Sarawak River in the southwest of Sarawak.

Area: 10.5 square miles.

Description: An interesting area of unique primary vegetation, which is largely tropical heath forest but is very varied. Twenty-five vegetation communities, including mangrove and mixed dipterocarp forest, occur. The Long-nosed Monkey (*Nasalis larvatus*) is well established within the park. Recreational facilities, including two bungalows and a hostel, are provided for visitors, and an extensive series of paths through the park is maintained.

B. Proposed:

1. Gunong Mulu National Park:

Status 1965: Proposals to constitute this park have been approved by the Sarawak Government and preliminary proclamations issued.

Location: On the watershed between Tutoh (tributary of the Baram River) and the Mendalam (tributary of the Limbang River) rivers; the international boundary between Sarawak and Brunei forms part of the northern boundary of the park.

Area: 239 square miles.

Description: A superb area of primary vegetation. Almost the whole of Gunong Mulu itself, Sarawak's second highest mountain (7,798 feet) falls within the park and primary forest occurs from the base, at approximately 400 feet, to the summit. The unique limestone mountains Gunongs Api and Benarat rising to over 5,000 feet (probably the highest limestone between north Thailand and New Guinea), are within the park. Wild life abounds.

A small group of nomadic Punans live in the park and their rights will be protected.

2. Matang National Park:

Status 1965: Proposals to constitute approved in principle by Minister of Agriculture and Forestry. Proposed boundaries at present being examined.

Location: Twelve miles west of Kuching, the capital of Sarawak, in southwest Sarawak.

Area: 8.5 square miles.

Description: An area of rugged terrain on the sandstone mountains Gunong Serapi (2,988 feet) and Gunong Matang. Lower slopes covered with mixed dipterocarp forest and the upper with submontane tropical heath forest. An interesting flora and fauna occurs within the park.

Easily accessible from Kuching the park will provide excellent recreational amenities for the population of the capital.

3. Gunong Gading National Park:

Status 1965: Proposals to constitute approved in principle by the Minister of Agriculture and Forestry. As the whole area falls within reserved forest constitution should not be difficult.

Location: On the coast thirty miles west of Kuching, near the town of Lundu.

Description: A compact group of small mountains (highest 2,900 feet) consisting of granodiorite and entirely covered with dipterocarp forest. Of great scenic beauty and of botanical interest.

Will become easily accessible from Kuching when the Kuching Lundu road is completed.

4. Sabal National Park:

Status 1965: Proposals to constitute approved in principle by Minister of Agriculture and Forestry. Constitution likely to be delayed as area lies close to border with Indonesia.

Location: In southwest Sarawak adjoining Kuching Simanggang road, seventy-five miles from Kuching.

Area: 5 square miles approximately.

Description: A broad transect of primary vegetation of ecological interest that is mainly not represented in other proposed parks.

5. Pelagus Rapids National Park:

Status 1965: Proposals to constitute approved in principle by Minister, Agriculture and Forestry, and by the Divisional Development Committee. Boundaries at present being examined. Constitution not likely to prove difficult as the proposed park largely falls within reserved forest.

Location: Ten miles upriver from Kapit on the Reijang River in Central Sarawak.

Area: 20 square miles approximately.

Description: An area of primary forest bordering on the most famous rapids in Sarawak. Of great scenic beauty and likely to have a great recreational potential for the residents of Sibuan and the Lower Rejang. The vegetation along the rapids includes some endemic species.

6. Simalajau National Park:

Status 1965: Proposals to constitute approved in principle by Minister, Agriculture and Forestry. Little difficulty is envisaged in constituting park as whole area falls within the Simalajau Forest Reserve.

Location: On coast ten miles northeast of Bintulu in Central Sarawak.

Area: 15 square miles approximately.

Description: An area of rocky coastland with diverse vegetation types containing one of few remaining undisturbed coastal terraces dominated by *Agathis alba*.

Will provide some of the best bathing and recreation facilities in Sarawak.

7. Sungei Dalam National Park:

Status 1965: Proposals to constitute approved by Sarawak Government and preliminary proclamations issued. Whole area formerly reserved forest and no difficulties are expected.

Location: On the outskirts of the town of Miri in northern Sarawak.

Area: 2 square miles.

Description: An exceedingly interesting small area of undisturbed tropical heath forest on very infertile soils. Easily accessible from Miri.

8. Lambir National Park:

Status 1965: Proposals approved by Sarawak Government and preliminary proclamations about to be issued.

Location: Fifteen miles from Miri and bisected by the main road that runs south from the town.

Area: 16 square miles approximately.

Description: A steep ridge of ecological interest that will preserve a range of vegetation communities that are localized in Sarawak and contains many interesting plants.

Access is easy from Miri and the proposed park will provide excellent recreational facilities for the people of that town.

9. Loagan Bunut National Park:

Status 1965: Proposals approved in principle by Minister, Agriculture and Forestry. Precise area of park not yet decided.

Location: Near the confluence of the Baram and Tinjar rivers twenty miles south of the town of Marudi in northern Sarawak.

Area: 20 square miles.

Description: The object of this park is to conserve an area of peat swamp forest. This forest type is being heavily exploited at present and there is a danger that no undisturbed forest will be preserved.

A shallow lake within the area will provide recreational facilities. It is known to have a rich migrant bird life and will be of particular interest to ornithologists.

10. Niah National Park:

Status 1965: Approved in principle by Minister, Agriculture and Forestry, and by the Divisional Development Committee. Constitution not likely to prove difficult as area is within reserved forest.

Location: Thirty-five miles southwest of Miri in northern Sarawak.

Area: 15 square miles approximately.

Description: The limestone massif of Gunong Subis is situated in the center of the proposed park. The Great Cave has one of the first archaeological sites in South East Asia and the millions of cave swifts and bats are of great zoological interest. The limestone flora is undisturbed and is of botanical interest, and includes many endemic plants.