

WORLD HERITAGE NOMINATION -- IUCN SUMMARY

405, SINHARAJA FOREST RESERVE (SRI LANKA)

Summary prepared by IUCN (April 1987) based on the original nomination submitted by Sri Lanka. This original and all documents presented in support of this nomination will be available for consultation at the meetings of the Bureau and the Committee.

1. LOCATION:

Situated in the south-west lowland wet zone of Sri Lanka, within Sabaragamuwa and Southern provinces. 6°21'-6°26'N, 80°21'-80°34'E.

2. JURIDICAL DATA:

A portion of the area was first declared a forest reserve in 1875. Some logging was carried out until 1978 when a logging ban was introduced and the area was accepted as a biosphere reserve. A National Wilderness Heritage Act is pending which would give the reserve full protective status. Currently the site consists of 6092 ha of Forest Reserve and 2772 ha of proposed reserve all of which is included in this nomination.

3. IDENTIFICATION:

This narrow strip of undulating terrain consists of a series of ridges and valleys. It is drained by an intricate network of streams, which flow into the Gin Ganga on the southern boundary and Kalu Ganga, on the northern boundary. The reserve lies within the transition zone of two important rock types characteristic of Sri Lanka. Mean annual rainfall recorded for the area is 3750-5000mm, most of which is from the south-west monsoons during May-July and the north-east monsoons during November-January. Sinharaja is the last extensive patch of primary lowland rain forest in Sri Lanka. Of Sri Lanka's 830 endemic species, 217 trees and woody climbers are found in the lowland wet zone. Of these, 139 (64%) have been recorded in the reserve, 16 of which are considered to be rare. A variety of plants of known benefit to man are present, of which the palm kitul (for jaggery, a sugar substitute), wewal (for cane), cardamom (as spice), dun (for varnish and incense) and weniwal (for medicinal purposes) are used intensively by villagers.

Faunal endemism is high, particularly for birds with 19 (95%) of 20 species endemic to Sri Lanka present. Endemism among mammals and butterflies is also greater than 50%. Threatened mammals are leopard and Indian elephant. The endemic purple-faced langur is present. Birds considered to be endangered or rare are Sri Lanka wood pigeon, green-billed coucal, Sri Lanka white-headed starling, Sri Lanka blue magpie, ashy-headed babbler and Sri Lanka warbler, all of which are endemic, and red-faced malkoha. The Sinharaja region has long featured in the legends and lore of the people of Sri Lanka. Its name, literally meaning lion (sinha) king (raja), perhaps refers to that original 'king-sized or royal forest of the Sinhalese'.

4. STATE OF PRESERVATION/CONSERVATION:

The reserve is partially protected under the provisions of the Forest Ordinance and is administered by the Forest Department, under the authority of the Ministry of Lands and Land Development. It was in 1936 that Sinharaja was first recognised as being "the only considerable patch of virgin tropical

rain-forest in the island". Owing to its inaccessibility and steep, hilly terrain, the reserve remained untouched until 1968 when a government directive was issued to extract timber for the plywood sawmill and chipwood complex established at Kosgama. From 1971 until 1977, when logging was banned, largely due to public pressure about 1,400ha of forest in the western sector were selectively logged.

Presently, the reserve has 6,500-7,000ha of unlogged forest. Since 1977, the Forest Department has given high priority to protecting the reserve and in 1978 began planting Pinus caribaea along the periphery to establish a live boundary. Recognising the need for maximum possible protection, the Forest Department plans to declare Sinharaja as a national heritage wilderness area under the proposed National Heritage Wilderness Areas Act. In order to ensure the strict protection of the reserve for scientific and aesthetic reasons, a scheme of zonation and management for areas outside the reserve is proposed in the conservation plan.

There are two villages within the south-west of the reserve, namely Warukandeniya and Kolonthotuwa, and about 52 families live in the north-western sector. At least 20 other settlements occur on the periphery, an unknown number of which have been illegally established on state land without approval from the relevant authorities.

Encroaching cultivations are probably the biggest problem, particularly along the southern boundary. Contractors open up routes to facilitate logging operations and, although no felling is permitted within 1.6km of the reserve boundary, this may render the reserve more accessible to illicit timber operations. The traditional use of minor forest products, most important of which are kitul for jaggery and wewal or cane for weaving baskets, is now restricted to forest surrounding the reserve. Illicit gem mining is considered to be a serious problem in eastern parts of the reserve.

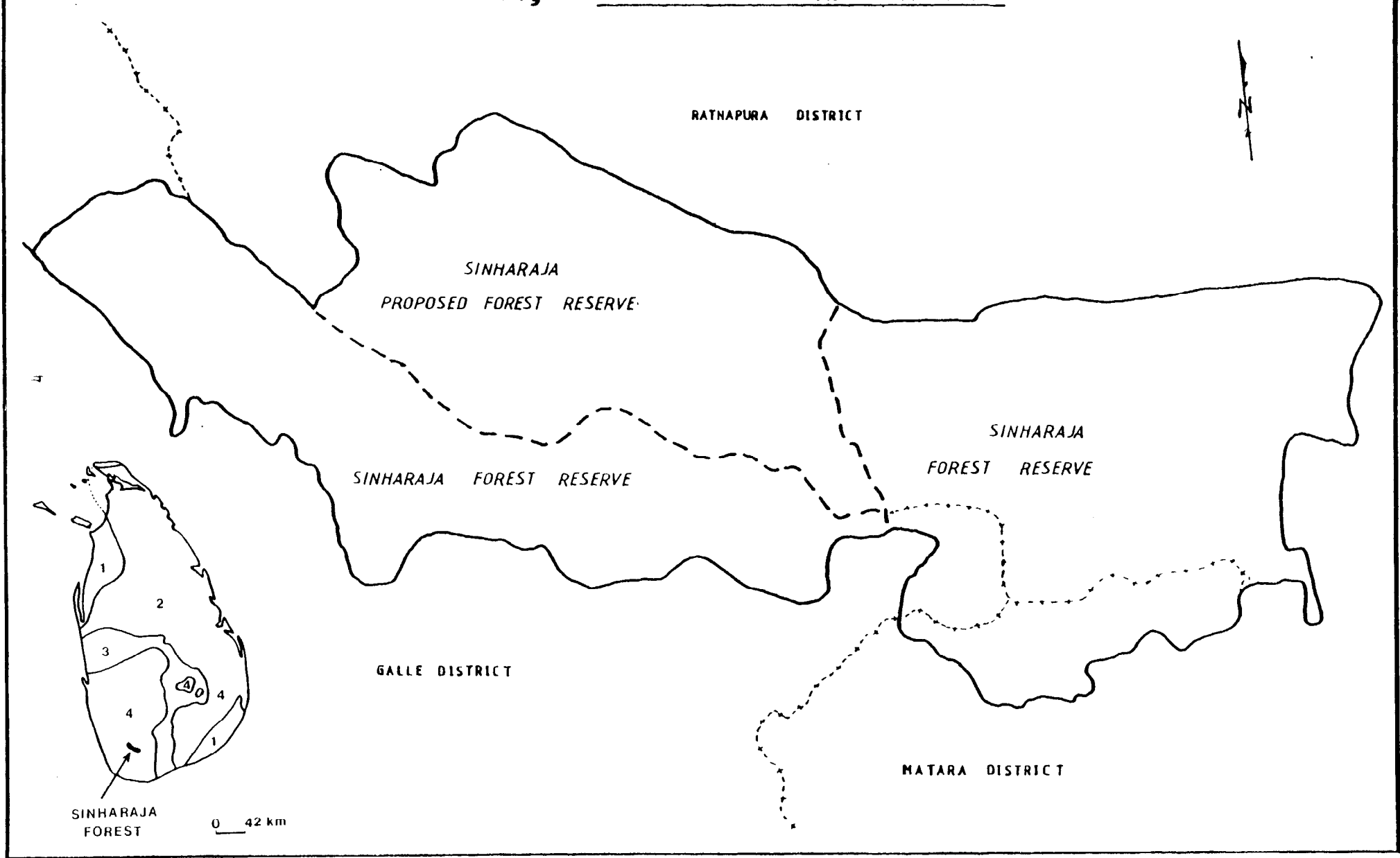
5. JUSTIFICATION FOR INCLUSION ON THE WORLD HERITAGE LIST:

The Sinharaja Forest Reserve nomination, as presented by the Government of Sri Lanka provides the following justification for designation as a World Heritage property:

a) Natural property

- (i) Earth's evolutionary history. Sinharaja's flora is a relic of Gondwanaland and thus is of importance to our scientific understanding of continental drift. The presence of the Sinharaja basic zone is also a geological feature of considerable interest.
- (ii) On-going Biological Evolution. The reserve is the last remaining relatively undisturbed tropical humid evergreen forest in Sri Lanka.
- (iv) Habitat of Rare and Endangered Species. At least 139 endemic plant species are found in the reserve. Faunal endemism also exceeds 50% and there are various rare birds, reptiles, fish and insects.

Fig. 2. SINHARAJA FOREST RESERVE



405 SINHARAJA FOREST RESERVE (SRI LANKA)

1: DOCUMENTATION:

- (i) IUCN Data sheet
- (ii) Consultations: Forest Dept. staff, S. and I. Gunatilleke, D. Sheppard, J. Sax, M. Forster, T.W. Hoffmann, V. Fernando, H. Synge, H. Eidsvik, N. de Zoysa, R. Fernando.
- (iii) Literature consulted: Conservation plan for the Sinharaja Forest, 1986.
- (iv) Site Visit: February 1987.

2. COMPARISON WITH OTHER AREAS

There are 27 biogeographic provinces within the Indomalayan Realm. Of these there are two occurring in Sri Lanka: Ceylonese Rainforest and Ceylonese Monsoon Forest. The Sinharaja Forest is the only surviving example of a viable size of Sri Lanka's rainforest and is thus the only representative of one biogeographic province within the Realm. Compared to other rainforests in the Realm, Sinharaja is less diverse and less well developed than some of the wetter forests of southeast Asia or the forests of the western Ghats in India.

3. INTEGRITY

The Sinharaja Forest Reserve forms a sufficiently large conservation unit for most conservation processes to continue functioning. However, the boundaries of the site are currently poorly defined and this is a barrier to the effective policing and management of the area. This issue is currently being addressed by the Sri Lankan Forest Department.

The conservation status of the reserve should be enhanced by the demarcation of "buffer zones" outside the existing boundaries of the Forest Reserve. The aim of this would be to regulate land uses occurring in this area and reduce the impact of intensive land uses on the reserve itself.

Regarding legislation there are a number of deficiencies of the Forest Ordinance, which provides inadequate protection for an area proposed for World Heritage listing. However, the Sri Lankan Ministry for Lands and Land Development has recently obtained cabinet approval to prepare a new "National Heritage and Wilderness Area Act". This legislation will include strict regulations prohibiting disturbance to the environment and will be immediately applied to the Sinharaja Forest Reserve. Revocation of areas under this legislation will be subject in the first instance to approval by Parliament and then final approval by the President. This legislation is not yet in force and a Committee reporting to the Minister of State suggests that it not be adopted.

Lack of staffing is a problem in relation to the policing of offences in the reserve, such as illicit timber felling, gemming and poaching. The current lack of staff and funding is a barrier to the effective, long term management of the area. The Sri Lankan Forestry Department has given the management of Sinharaja a high priority and allocated funds according to priorities spelled out in the management plan. IUCN and WWF have also provided funding for the preparation of a management plan and on-going management programmes.

There are currently two villages within the reserve boundaries and a number of villages are located near the reserve perimeter. The main issues associated with traditional use are: encroachment into the reserve; exploitation of plant species leading to an erosion of genetic diversity; and villager dependence on the forest for their livelihood. The traditional use issue is being addressed in the management plan through extension programmes and through the delineation of a buffer zone. Both of these strategies aim to shift traditional use activities outside the reserve and to improve relations between traditional users and the reserve managers.

In Sri Lanka there is a strong level of public support for nature conservation in general and the conservation of the Sinharaja Forest Reserve, specifically. This is evidenced by the large number of government bodies involved in forest/nature conservation in Sri Lanka. The implications for the management of Sinharaja are that recurring proposals for resource exploitation within the reserve are strongly opposed by a large number of effective and influential conservation lobby groups.

4. ADDITIONAL COMMENTS

Sinharaja was accepted by UNESCO as a biosphere reserve in 1978.

5. EVALUATION

The evaluation of the importance of the Sinharaja is based on the fact that:

- it is the last viable remnant of Sri Lanka's tropical lowland rainforest
- over 60% of the trees in the area are endemic and many of these are considered rare
- there are 21 endemic bird species found in the reserve and a number of rare insects, reptiles and amphibians.

All the above suggest that the Sinharaja meets category iv "Habitat for rare and endangered species", and therefore merits inscription on the World Heritage List. It also meets criterion ii as an outstanding site for study of the processes of biological evolution.

It should be noted that the 6th Session of the Bureau (1982) deferred the acceptance of the site due to inadequate legislative protection. This has yet to be upgraded and a portion of the area is still a proposed forest reserve. Although a draft National Wilderness Heritage Act has been prepared this has not yet passed through Parliament. Changes in the draft legislation have been suggested by legal experts of IUCN's Environmental Policy and Law Commission, as the text needs substantial revisions before it is considered acceptable. Failing this new legislation, IUCN agrees with the report of the Committee for the Formulation of a National Policy for the Preservation of Flora and Fauna and would recommend use of the Fauna and Flora Ordinance as administered by the Department of Wildlife Conservation.

6. RECOMMENDATIONS

The Sinharaja, with its strong focus on research and training and involvement of traditional users, is an ideal biosphere reserve. It also meets two criteria for World Heritage listing. As its legal status has still not been upgraded, however, the 1982 decision of the Bureau to defer the nomination remains valid.