

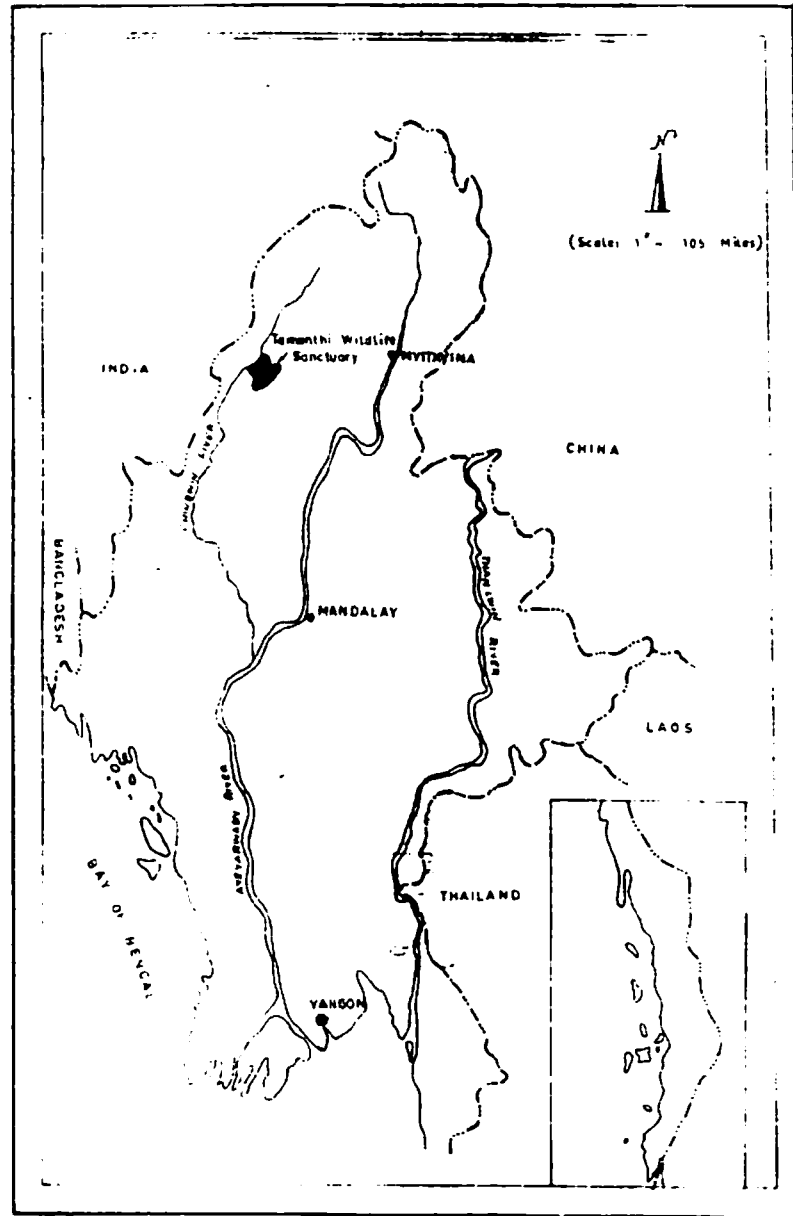
**IUCN/SSC  
ASIAN RHINO SPECIALIST GROUP  
(AsRSG)  
MEETING**

***BRIEFING BOOK***

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**SECTION 9  
MYANMAR RHINO ACTION PLAN**

# RHINOCEROS CONSERVATION PLAN MYANMAR



Wildlife and Sanctuaries Division  
Forest Department  
Ministry of Forestry  
West Gyogon, Insein  
Yangon, MYANMAR

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# RHINOCEROS CONSERVATION PLAN FOR MYANMAR

## SUMMARY

### The Rhinoceroses

In performing field exploration and reassessment of Tamanthi Wildlife Sanctuary recently, there were many hindrances and difficulties due to inaccessibility and bad weather. Anyhow it is firmly believed that rhinoceroses still exist in Tamanthi Wildlife Sanctuary, although it still needs more exploration and field studies. At the moment, rhinoceros conservation for Myanmar will be confined to well establishment and effective management of Tamanthi Wildlife Sanctuary.

When condition in all aspects are favourable, potential sites where rhinoceros could be found, namely, Shwe-U-Daung Wildlife Sanctuary, Kahilu Wildlife Sanctuary, Namlang area and areas in Kawkareik and Dawei Forest Divisions, bordering with Thailand, shall be explored and surveyed from time to time.

### The Projects

The rhinoceros conservation plan aims to safeguard the remaining number of rhinoceros in Myanmar in general and in Tamanthi Wildlife Sanctuary in particular. Short term objectives include training and continued and improved security. Long term objectives are improved park management, public awareness and research. Although a considerable amount of investment and support are required to implement this plan, it is to believe that success is possible. The plan presents nine small and medium projects at the concept stage and totals for each main activity are shown below.

Main Activity	Number of Projects	Funds Needed (US \$)
Park Management	4	240,500
Public Awareness	1	42,000
Security	2	50,000
Research	1	56,000
Training	1	10,000
<b>TOTAL US\$</b>		<b>398,500</b>

## CONTENTS

1. Introduction . . . . .	1
2. Situation of Rhinoceros in Myanmar . . . . .	1
3. Distribution records of rhinoceros. . . . .	2
4. Habitat, Ecology and Threats . . . . .	5
5. Protective Measures . . . . .	5
6. Development of Tamanthi Wildlife Sanctuary . . . . .	6
7. Projects . . . . .	6
8. Conclusion . . . . .	7
9. Maps . . . . .	8
10. References	
11. Appendices (Project Titles)	

# **Rhinoceros Conservation Plan for Myanmar**

## **1. Introduction**

Once, Myanmar was well known for possession of Sumatran rhinoceros, Javan rhinoceros and Indian rhinoceros. According to previous distribution records of rhinoceros, it was assumed in early 1980s that rhinoceros in Myanmar was on the verge of extinction. But this assumption was doubtful as there were reports and informations to the Forest Department that fresh rhino tracks were found in some sanctuaries in 1992. The participant who attended Informal Preliminary Meeting Between the Rhinoceros Range States and Donors on Financing the Conservation of the Rhinoceros, held in Nairobi, 16-18 December 1992, pointed out that reassessment of these sanctuaries were urgently needed and the existence and status should be confirmed. He also pointed out that as the staff of Forest Department was inexperienced concerning with rhinoceros conservation, external assistance in terms of expertise and equipment should be sought. Consequently two staff officers from Wildlife and Sanctuaries Division of Forest Department were sent to Malaysia and trained in surveying rhinoceros in February, 1993 with the assistance of World Wildlife Fund (US). Rhinoceros survey in Tamanthi Wildlife Sanctuary was begun and surveys will be done in potential areas when conditions are favourable.

## **2. Situation of Rhinoceros in Myanmar**

Myanmar forests had been systematically managed by the Forest Department since 1856. The first wildlife sanctuary was established in 1918 and now there are altogether 16 wildlife sanctuaries, covering 0.8% of the total area of the country.

The Wildlife and Sanctuaries Division of the Forest Department is responsible for looking after the existing sanctuaries and three more parks, altogether covering about 1.07% of the country's total area. The Division is aiming to establish a network of representative protected areas, at least covering about 5% of the total area of the country.

Before the Second World War, Myanmar was well known for possession of varied wildlife species. However, our wildlife suffered considerably during the war and the population of wildlife species diminished at an alarming rate. Consequently some of the big mammals were facing with extinction. The two species of Javan rhinoceros and Sumatran rhinoceros were feared to be extinct.

Once, three species, namely, Sumatran rhinoceros (*Dicerorhinus sumatrensis*), Javan rhinoceros (*Rhinoceros sondaicus*) and Indian rhinoceros (*Rhinoceros unicornis*) were found in Myanmar. Indian rhinoceros was regarded as straggler or remanant and its population estimate was never made. According to previous distribution records of rhinoceros (Salter, 1983) and remarks by the authors concerned it was assumed in early 1980s that rhinoceros in Myanmar was on the verge of extinction. But this assumption was being challenged as there were reports in 1991 and 1992 to the Forest Department that some fresh rhino tracks were found in Tamanthi and Kahilu wildlife sanctuaries and in Putao District. (See Figure 1, Distribution records of rhinoceros)

### 3. Distribution records of rhinoceros.

- 1 Nam Lang - Puto - Bumpha Bum: rhinos still present in Nam Lang valley in Mid-1950s (Tun Yin 1954,1956). Some rhinos said to be forced into lowlands around Putao by heavy snowfalls in surrounding hills, estimated population in adjacent Tirap border ares 4-6 (Talbot 1960). Unconfirmed report of estimated 16 on Bumpha Bum in 1962 (Keenan 1965, Tun Yin 1973; Tun Yin's 1967 estimate of 6-8 and his 1980 estimate of 15-20 apparently also are based on this record). Occurence of 3 rhinos in Putao District was reported in early 1992.
- 2 Uyu River: estimated 5 in Uyu drainage (Reynolds 1954): population of 7-8 in lower Uyu and 3 in upper Uyu (Talbot 1960). No recent estimates are available.
- 3 Tamanthi Wildlife Sanctuary: a few animals in triangle between Uyu and Chindwin rivers (Hundley 1952); estimates of 6 (Forest Department unpublished questionnaire data 1960-61, Tun Yin 1973) and 7 (Forest Department unpublished 1980-81) for Upper Chindwin Forest Division, presumably refer to this area. In 1978 tracks of a total of 7 animals were seen in two different locations (Hundley 1981b). Tun Yin (1980) gave an estimate of 4-5 for the Tamanthi area. There were reports coming to the Forest Department that in May 1991, tracks of a total of 5 rhinos wreere seen in two different locations.
- 4 Laisai Tract: reliabie report of 30 (Tun Yin 1956); later estimates put the population as possibly 10 (Milton and Estes 1963) and 6-7 (Tun Yin 1980). Local estimates of 50 considered to be improbable (Milton and Estes 1963). Estimate of 2 (Forest Department unpublished 1960-61) and 5 (Forest Department unpublished 1980-81) for

West Katha Forest Department presumably refer to the southern part of the Laisai Tract and possibly also to the Uyu drainage. Recent estimates are not available.

- 5 Padaung Wildlife Sanctuary: rhinos known to occur, probably migrating in from Uyu area to west (Reynolds 1954). Now very doubtful of occurrence.
- 6 Bhamo Forest Division: rhino seen in post-war years (Reynolds 1954). Not found nowadays and estimates are not available.
- 7 Shwe-U-Daung Wildlife Sanctuary: maximum estimated pre-war population 12-15 (Tun Yin 1954). post-war estimates vary from 8-15 (in 1947, Milton 1958), 4-5 in 1948, (Reynolds 1954), 2 (Milton and Estes 1963), 2-4 (Tun Yin 1980).
- 8 Shan plateau: may still exist in parts of Shan plateau, especially Salween drainage (Reynolds 1954), but no recent estimates.
- 9 Chin Hills: estimated population 1 (Forest Department unpublished 1960-61), 3 or less (in lemro Forest: Ral lian Sum and Tin Aung 1970), possibly 4 (Tun Yin 1973). A single animal reportedly remained in Mt. Victoria area until about 20 years ago (NCNPP 1983f).
- 10 Rakhin Yoma: previously widespread from north to south, including both the eastern and western sides of the main drainage (Emanuel and Saw Sein Ohn Pe 1948, Hobbins 1948, Milton 1958, Han Myint 1959, Tallbot 1960) but now either extinct or very rare. Recent population estimates 6 (Reynolds 1954), 7-11 (Talbot 1960), 8 (Forest Department unpublished 1960-61, using composite totals from Minbu, Thayetmyo, Rakhine and Hinthada/Pathein Forest Division), 3-5 (Milton and Estes 1963), 1 (Tun Yin 1973). Local residents interviewed during 1983 surveys generally believed rhinos to be extinct in the area (NCNPP 1983 g). One resident reported seeing tracks and dung in Sabyin Reserved Forest in 1982, but others familiar with the area had seen no rhino there for 35 years (NCNPP 1983 b). One shot in the Chittagong Hill Tracts of adjacent Bangladesh in 1967 was believed to be a vagrant from a small population in Myanmar (Mountfort 1967).
- 11 Bago Yoma: Formerly occurred in South Bago (Forest Department unpublished 1960-61, Saw Han 1964), Tharrawaddy (Ye Myint and Oo Maung 1963), Insein (Oo Maung 1965) and North Bago Forest Division (Forest Department unpublished

1980-81). Population size estimated as 5 (Reynolds 1954), 6-8 (Talbot 1960), 1 (Forest Department unpublished 1960-61, Tun Yin 1973), (Forest Department unpublished 1980-81). Surveys of various part of the Bago Yoma in 1982 (NCNPP 1982a, 1982i, 1982j) suggested that rhinos are no longer found in the area.

- 12 Kahilu Wildlife Sanctuary: pre-war population possibly as high as 7 (Milton 1958); latest estimates vary between 2 and 3 (Reynolds 1954, Talbot 1960, Tun Yin 1973) although as far as is known the area has not been examined since the late 1940s, when tracks of 2 were seen (Tun Yin 1954). Initially it was believed that *R. sondaicus* occurred in the area, but Weatherbe (1939) was unable to find conclusive evidence of this species and subsequent report are believed to refer to *D. sumatrensis* (Tun Yin 1954). A native of the area gave an information that he had seen 1 rhino in 1984.
- 13 Kelatha Wildlife Sanctuary - Kyaikhto: estimated to occur in area (Talbot 1960, Forest Department unpublished 1960-61, Myint Swe 1964, Tun Yin 1973). No recent estimates are available.
- 14 Kawkareik Forest Division: formerly occurred in Dawna Range, reportedly including Mulayit Wildlife Sanctuary (Reynolds 1951, Milton 1958). Estimated population 1-2 (Milton 1958, Forest Department unpublished 1960-61, 1980-81, Tun Yin 1973). Recent estimates are not available.
- 15 Dawei Forest Division: Both *R. sondaicus* and *D. sumatrensis* formerly occurred (Peacock 1933, Pe Sein and Maw Din 1959, Tun Yin 1967). Although the *R. sondaicus* shot by hubback in lower Tanintharyi in 1920 is apparently the last authenticated record, Tun Yin (1967) gives four records of animals killed by poachers or seen between 1954 and 1961, and Lekagul and Mcneely (1977) report the species from adjacent areas of Thailand. *D. sumatrensis* had apparently also declined to extinction or near-extinction levels; the remaining population for Tanintharyi (possibly including some areas north of Dawei Forest Division) has been estimated as 2 (Talbot 1960) and 5-10 (Milton and Estes 1963). Tun Yin (1980) did not list any rhinos remaining in Tanintharyi. Recent estimates are not available.



#### 4. Habitat, Ecology and Threats

The habitat of the Sumatran rhinoceros is generally described as heavy evergreen forest on steep hill tracts, usually near the headwaters of perennial streams (Evans 1905, Peacock 1933, Anonymous 1955, Milton 1958, Talbot 1960). According to Smith (1930), in the Shwe-U-Daung Sanctuary they were partial to secondary vegetation grown up on sites of former agricultural clearings. Some wandering to flat, low elevation areas occurred (Evans 1905, Smith 1930, Milton 1958). The Javan rhino apparently also occupied heavy evergreen forests on steep hillsides (Evans 1905, Anonymous 1955, Milton 1958) although it also occurred on low-lying swampy plains (Anonymous 1955, Milton 1958) and around Victoria Point, the species was reportedly found in evergreen forests on flat areas, and never in the hills (Peacock 1933). Both species are considered to be browsers (Evans 1905, Peacock 1933, Anonymous 1955, Talbot 1960, Tun Yin 1967), feeding on the leaves, shoots and fruit of a variety of species, including bamboo. Sugarcane and other crops growing in hill areas may also be eaten (Milton 1958). In Myanmar virtually all parts of the animals, including the blood and urine, are considered to have medicinal value. The consequent demand for various rhino products by the Chinese, Burman and hill tribe communities has resulted in a long history of continuous and heavy poaching. Rhinos were formerly hunted with bows and spears or by means of pitfalls and traps; the replacement of these methods by hunting with firearms, along with continued high market value for rhino products, probably accelerated their decline (Milton 1958).

#### 5. Protective Measures

Listed as completely protected animals (i.e. not to be hunted except under a licence issued by the President for scientific purposes under the Myanma Wildlife Protection Act, 1936). There have also been attempts to protect rhino populations by establishing wildlife sanctuaries around remnant populations. The 207 km<sup>2</sup> shwe-U-Daung Sanctuary was established in 1918 to protect a population of 12-15 Sumatran rhinos, but poaching during and subsequent to World War II depleted the population to the point where in 1980 an estimated 2-4 remain. The 161 km<sup>2</sup> Kahilu Wildlife Sanctuary was also constituted in 1928, primarily for the protection of a small rhino population, but effective control over human use of the Sanctuary was never secured and poaching likely continued after the area was constituted (Weatherbe 1939). The 2151 km<sup>2</sup> Tamanthi Wildlife Sanctuary, constituted in 1974, is believed to have up to 7 Sumatran rhinos in 1978. The species and its habitats will be given complete protection under new wildlife legislation and appropriate protective measures will be given in the sanctuaries concerned.

## 6. Development of Tamanthi Wildlife Sanctuary

Tamanthi Wildlife Sanctuary was notified in 1974. It covers an area of 2151 km<sup>2</sup> or approximately 830 sq. miles and its location is 25° 26' N, 95° 37' E, Sagaing Division. This wildlife sanctuary was primarily constituted for conservation of Sumatran rhinoceros (*D. sumatrensis*), Asian elephant (*Elephas maximus*) and Gaur (*Bos gaurus*).

For the development of Tamanthi Wildlife Sanctuary, the following project activities shall be carried out.

- Boundary demarcation of Tamanthi Wildlife Sanctuary.
- Construction and maintenance of buildings and roads.
- Transportation and communication.
- Establishment of a wildlife anti-poaching force.
- Support for field staff.
- Improvement of social facilities within the sanctuary.
- Educational programme for wildlife conservation with particular reference to rhinoceros.
- Studies on ecological investigation of rhinoceros.
- Study tours.

The organizational structure for the development of Tamanthi Wildlife Sanctuary will be a total of sixty permanent staff and occasionally hired temporary labourers. There would be one park warden who will be in charge of the whole sanctuary. Under the supervision of the park warden, there will be four sections, namely, administration/budget section with strength (15), educational section with strength (10), research section with strength (10), and security section with strength (24).

## 7. Projects

There will be 9 small projects involving main activities on park management, security, research, training and public awareness, totalling US \$ 398,500.

## 8. Conclusion

Regarding with species management, Government of Myanmar is paying attention on conservation of Myanma elephant (*Eliphas maximus*) and conservation of Myanma Eld's deer (*Cervus eldi thamin*). It would be very much appreciated if some donors could share their interest in conservation of rhinoceros in Myanmar, thereby promoting species management. Although Tamanthi was notified as a wildlife sanctuary in 1974 it was not well looked after due to inadequacy of staff and fund. The systematic development and management plan was not prepared so far. The present proposed plan of rhinoceros conservation in Myamar is prepared with minimum requirements of funds, equipment, other facilities, etc. If the proposed plan is approved and well funded, it is believed that the conservation of rhinoceros in Tamanthi Wildlife Sanctuary and in other relevant areas will be successful.

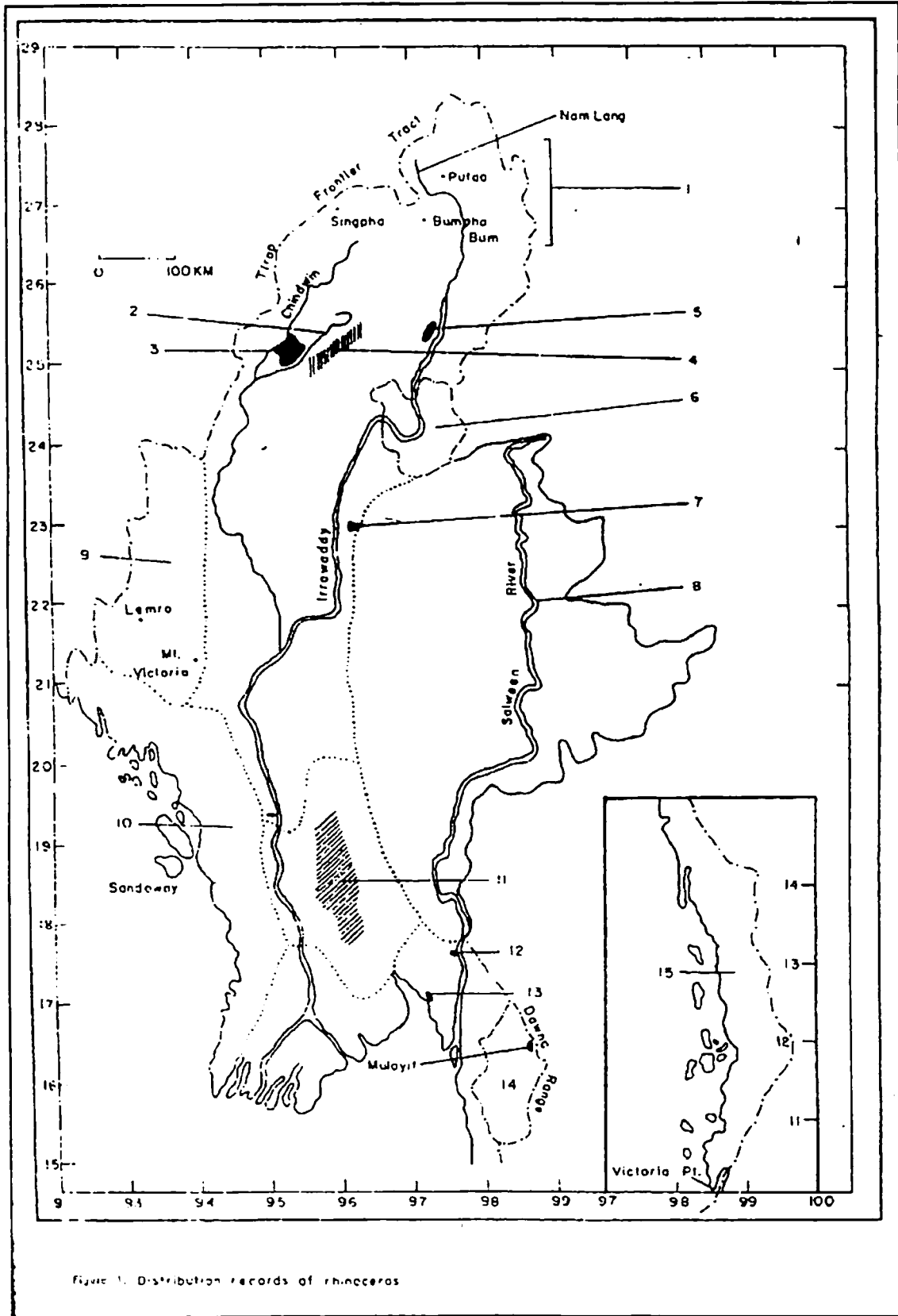


Figure 1. Distribution records of rhinoceros



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NCNPP = Nature Conservation and National Parks Project (1981-84)