

WILD LIFE PRESERVATION AND SANCTUARIES  
IN THE UNION OF BURMA

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(With a map)

INTRODUCTION

There are eleven Wild Life Sanctuaries comprising 914.87 sq. miles in the Union of Burma.

Pidsung Wild Life Sanctuary (279.70 sq. miles) is situated in the Kachin State. Part of Shwe-U-Daung (45.00 sq. miles) and Taunggyi (6.20 sq. miles) are situated in the Shan States, Kahilu (62.00 sq. miles) and Mulaikit (53.51 sq. miles) are situated in the Kaw-Thu-Lay (Karen) State. The remaining sanctuaries are situated in Burma proper. They are:

Shwe-U-Daung	...	...	81.00 sq. miles
Kyatthin	...	...	104.00 " "
Shwezettaw	...	...	213.40 " "
Maymyo	...	...	39.91 " "
Moscos Islands	...	...	19.00 " "
Wettigan	...	...	1.70 " "
Kelatha Hill	...	...	9.45 " "

Shwe-U-Daung and Kahilu were constituted primarily to protect the few remaining specimens of *Dicerorhinus sumatrensis* from extinction, Shwezettaw and Kyatthin to perpetuate *Panolia aldi thomasi* Thomas, the typical deer of Burma. Pidsung was a natural haunt of various species of wild life, except rhino, and was the show place before 1940. Unfortunately it has been shot out during the last World War. Maymyo, Taunggyi and Kelatha Hill are refuges for various species of land birds and Wettigan Lake is a refuge for waterfowl.

Immediately prior to the British evacuation in 1942, preliminary notifications were issued in respect of Htu Lake in the Henzada Forest Division for waterfowl, and Byingye Hill in the Yamethin Forest Division to protect the remaining accessible heads of goral. The Game Warden was appointed Settlement Officer in respect of these two proposed sanctuaries. As the post of Game Warden is at present held in abeyance, settlement cannot yet be carried out.

LEGISLATION

Section 6 of The Burma Wild Life Protection Act, 1936, reviewed in the Society's Journal, [Vol. 39 (3), pp. 606-607. 1937] affords

complete protection to rhinoceros, tapir, peafowl, Argus pheasant and masked finfoot. But the proviso to the said section reads as follows:—

'Provided that it shall not be an offence for any physician or druggist to possess or sell, or for any person to possess for private medical purposes rhinoceros blood or any preparation thereof.'

Under section 7, no person shall hunt any of the following animals or knowingly possess or sell or buy them alive or dead or part or product thereof save under and in accordance with the conditions of a licence:—

Elephant, bison, teasing, thamin, serow and goral.

Section 8 prescribes a close season from 15th June to 30th September for hog-deer, sambar and barking-deer and from 15th March to 30th September for all species of pheasant (except Argus pheasant), partridge, junglefowl, quail, wild duck and teal.

Under sections 26 and 28, the Burma Wild Life Protection Rules were published in the Department of Agriculture and Forests Notification No. 2, dated the 2nd January 1941. The rules came into force on the 11th January 1941.

The Scheduled Areas Wild Life Protection Regulations (Regulation No. 1 of 1941) was published by the Defence Department, Political Branch, on the 10th February 1941. It extends to the following areas:—

- (i) The Arakan Hill Tracts;
- (ii) The Chin Hills District;
- (iii) So much of the Kachin Hill Tracts of the Myitkyina, Bhamo and Katha Districts as is included in the Myitkyina, Bhamo and West Katha Forest Divisions;
- (iv) The Shan States of Hsawngshup and Singkaling Hkamti and the Souma Tract in the Naga Hills District.

The provisions of the Burma Wild Life Protection Act, 1936, shall apply to the areas mentioned above subject to the modifications as set forth in the Schedule.

Firstly, the Wild Life Protection Regulation has been extended only to the Kachin Hill Tracts in the three Forest Divisions—Myitkyina, Bhamo and West Katha.

The Kachin Hill Tribes Regulation 1895 has been declared as the law applicable to the hill tribes in the following tracts:—

- (i) The Kachin Hill Tracts of the Bhamo, Myitkyina, and Katha Districts;
- (ii) The Hill Tracts of the North Hsenwi State; and
- (iii) The Kodsung Hill Tracts of the State of Mongmit.

This Regulation applies to the undermentioned tribes in the above-mentioned tracts:—

(i) Bhamo and Myitkyina Districts: Kachins, Yawyins, Nungs, Marus, Lashis, Atais, and Chins (Nagas); and also Shans and Gurkhas permanently resident in a hill tract. (N.B. The term *shans* includes *Shan-gyi*, *Shan-tayok* and *Shan Burmese* but does not include the *Shan Burmese* in the hill tracts of the Mogaung Sub-Division.)

- (ii) Katha District—Kachins.
- (iii) North Hsenwi—Kachins.
- (iv) Mongmit—Kachins and Palaungs.

The Hkamti Long Administration Order, 1926, applies to the eight Shan Circles in the Putao Sub-Division of the Myitkyina District:

(i) Lonkhun, (ii) Munsai, (iii) Lonkyein, (iv) Mansakhun, (v) Munnu, (vi) Langsao, (vii) Mongysak, and (viii) Langnu in Hkamti Long.

The remainder of the Sub-Division is part of the Kachin Hill Tract and has the Kachin Hill Tribes Regulation applied to it.

Under Section (3) sub-section (1) of the Kachin Hill Tribes Regulation, notwithstanding anything in any enactment in force, this regulation and the enactments in the Schedule annexed shall be deemed to be the only enactments which apply to members of a hill tribe in a hill tract.

Under Section (3) sub-section (2) no other enactments shall be deemed to apply to members of a hill tribe in a hill tract.

To sum up, the position as the writer can interpret it is as follows:

The Burma Wild Life Protection Act does not apply to the Kachins, Yawyins, Nungs, Marus, Lashis, Atnis and Chins (Nagus); and also Shans and Gurkhas permanently resident in a hill tract in the Bhamo and Myitkyina District, and Kachins in the Katha District.

Regulation 1 of 1941 is applicable only to non-members of a hill tribe resident in hill tracts of Myitkyina, Bhamo and West Katha Forest Divisions.

Burma became a Sovereign Independent Republic known as 'The Union of Burma' on the 4th January 1948.

Section 226 sub-section (1) of the Constitution of the Union of Burma reads: 'Subject to this Constitution and to the extent to which they are not inconsistent therewith, the existing laws shall continue to be in force until the same or any of them shall have been repealed or amended by a competent legislature or other competent authority'.

Under Section 6 of the Constitution Myitkyina and Bhamo Districts form a constituent unit of the Union of Burma known as 'The Kachin State'.

The few surviving specimens of *Dicerorhinus sumatrensis* in the Nam Lang Valley, Putao Sub-Division and Kungsai tract, Kamsing Sub-Division, Myitkyina District are wholly unprotected. And so are other rare animals such as the takin, musk deer, panda, goral and serow.

If the present surviving specimens are to be saved, it is necessary to extend the Burma Wild Life Protection Act to the whole of the Kachin State and at the same time amend the Kachin Hill Tribes Regulation and Hkamti Long Administration Order.

Under Section 196 of the Constitution the Chin Hills District and the Arakan Hill Tracts form a Special Division of the Chins.

The Chin Affairs Council has gone ahead by extending the Wild Life Protection Act, 1936, to the whole of the Chin Special Division by the Chin Special Division (Extension of Laws) Act, 1948 (Act No. 48 of 1948).

Under section 5 of the Constitution the Federated Shan States and Wa States form a constituent unit of the Union of Burma.

In 1937, the Federal Council of Shan Chiefs decided that the application of the Shan State Game Rules should cease to extend to those States or parts of States over which the Forest Act has ceased

to apply, and also to Block VI of the Southern Shan States Forest Division which lies in the remote Mekong drainage of Kengtung State.

The protection of game in areas to which the Shan States Game Rules, 1929, do not apply was undertaken by the Chiefs concerned. The Chiefs agreed to issue prohibitory orders under customary laws.

(1) Affording protection to bison, serow, goral and peafowl so as to allow shooting only under permits issued by the Chiefs of the States.

(2) Protecting animals during closed times similar to those in force in Burma.

It will be noticed that taming was not included. There are no more Chiefs. Who is now the competent authority to issue prohibitory orders under the customary laws—the Commissioner, the Special Commissioner, or the Ministers of the Shan States?

From the following extract from the Annual Report on Wild Life Preservation in the Federated Shan States for the year ending 31st March 1941, it is not clear whether the Shan States Game Rules, 1929, have since been amended:

'As the Burma Wild Life Protection Rules framed under the Burma Wild Life Protection Act, 1936, have now been issued, the question will be taken up of amending the Shan States Game Rules to accord as far as possible with the Burma Act and Rules thereunder'.

The Scheduled Areas Wild Life Protection Regulation (Regulation No. 1 of 1941) applies only to the Shan States of Hsawnghsup.

It is necessary to examine the laws at present applicable to preservation of wild life in the Shan States and extend the Wild Life Protection Act to the whole of the Shan States.

Under section 7 of the Constitution, the territories that were heretofore known as the Karenni States, viz. Kantarawaddy, Bawlake, and Kyebogyi form a constituent unit of the Union of Burma which is known as 'the Kayah State'. The position of the law is not complicated as in the Shan States. The Burma Wild Life Protection Act, 1936, can be extended straightaway and extension is recommended.

The Kaw-Thu-Lay (Karen) State was recently constituted. The Burma Wild Life Protection Act may be extended to it as in the case of the other constituent States. There should be a uniform law throughout the Union of Burma.

It is gratifying to learn that the Forest Law Amendment Committee has recommended the deletion of the proviso to section 6 and to place the burden of proof on the possessor as in the case of possession of meat of wild animals during their close season. Early legislation is necessary to remove this 'very large loophole for illicit dealings in rhinoceros blood which means dead rhinoceros.' [*JBNHS*, vol. 40 (4), pp. 594-517].

The exception is a blot on an otherwise excellent Act, but it was essential for the reason that so many people in Burma have such implicit faith in the efficacy of rhinoceros blood for medicinal purposes. Had this exception been omitted, the Bill would probably not have been passed. [See *JENHS*, vol. 39 (3), pp. 606-608, September 1937].

## THE PIDAUNG GAME SANCTUARY

The Pidaung plain was known in old Burma as one of the best localities for big game (bison, teasing, sambar and elephant) in the Province. It used also to be famous for the herds of hog-deer that were found there. The name originated from the open stretch of country or *luis* covered with short grass situated to the north of Pidaung railway station on the Burma State Railways. The whole stretch of country over which the game was plentiful covers a very wide area containing several *luis* separated by hills covered with densest evergreen jungle. The first proposals came from the Commissioner of the Mandalay Division in 1908. He stated that owing to the spread of cultivation big game was rapidly decreasing and Pidaung plain was a natural haunt and sanctuary. Leading officials in Myitkyina interested in shooting were unanimously in favour of reservation. The settlement was carried out at the close of 1911. Approximately 180 sq. miles were finally notified in April 1913. The reserved area covered the stretch of country north of the railway only. In 1917 the Reserve was visited by H. E. the Lieutenant-Governor, Sir Harcourt Butler, and orders were issued for a further reservation of the area south of the railway line. This was really part of the so-called plain and contained several salt licks constantly frequented by game. The settlement was carried out in 1920, the reserve being finally notified in August 1921. The original Reserve was notified under the Burma Game Rules, 1917, as a Game Reserve in October 1918, and the south extension in 1921. Both Reserves were notified as a Game Sanctuary in September 1927. The area was then computed as 260 sq. miles. In 1937 the area was re-computed as 277.5 sq. miles. By the constitution of the Pidaung East Extension Reserve as part of the sanctuary in 1938, the area was further increased from 277.5 to 282.5 sq. miles. In order to provide a natural instead of an artificial boundary, and to free land for cultivation, an area of about four sq. miles on the west of Pidaung Sanctuary was excluded from the sanctuary in 1940. Approximately 0.786 of a sq. mile (471 acres) situated in the Kamsang Kachin Hill Tract was declared as the Pidaung West Extension Reserve and included in the Sanctuary in 1941. The present area of the sanctuary is approximately 279.7 sq. miles. During the period of Japanese occupation 4,352 acres of Pidaung Reserve and 7,129 acres of Pidaung South Extension Reserve were encroached on by Kachins from Mayan Village. This whole area is now under paddy cultivation. The harm has been done, and it seems that the Forest Department may now have to exclude this area finally.

The sanctuary was primarily constituted for the following species:—Elephant, bison, teasing, sambar, hog-deer, barking-deer, pig, tiger, leopard, bear, penfowl, junglefowl, pheasant, partridge and quail.

There are 45 miles of paths and 57 miles of fair-weather motor road which were constructed before the war. The Stilwell Road which was constructed during the war passed through the southern sector of the sanctuary for a distance of about  $7\frac{1}{4}$  miles (Mile 13/4 to Mile 21/0). From Mile 17/0 of this highway, a branch road was also constructed to *Hopak*, a distance of about a mile. All the main salt

licks and lairs<sup>1</sup> can now be reached by jeep. A special game staff of one head keeper and five assistant keepers is maintained.

Lt.-Col. R. W. Burton, I.A. (Retd.), has fully described this sanctuary in Burma (pre-1942) with present status of Rhinoceros and Thamin [JBNHS, 49 (4), 1950].

March 1951 - February 1952. During my tenure of office as Deputy Commissioner, Myitkyina District, I camped in the sanctuary on four occasions and spent a total of eight days. The majority of the villages just outside the boundaries of the sanctuary were also visited. I observed an elephant in Kyauan lick on one evening in March, a sambar stag in Manaw lick for several minutes one morning in May, a hog-deer stag feeding in Kason lair one evening and a small herd of teasing feeding in Pyawbwe lair on the following morning in June. In the course of my wanderings I disturbed a bison on one occasion, sambar and barking-deer on several occasions; peafowl and red jungle-fowl were seen all over the sanctuary, Blackbreasted Kalij Pheasant (*Gennaeus lathamii*) was seen once; Hoolock Gibbon (*Hyllobates hoolock Harlan*), the Chindwin Langoor (*Trachypithecus pileatus shortridgei* Wroughton), the Burmese Pigtailed Macaque (*Macaca nemestrina* Linnaeus) and Phayre's Leaf-monkey (*Trachypithecus phayrei phayrei* Blyth) were also seen.

The station master, Pidaung, had seen a leopard (black variety) in the dry bed of a chaung near the railway station. In March 1952, a leopard (black variety) was shot in the sanctuary. The forest officer who set up failed to turn up at the hour scheduled for the departure of the 'Governor's Special'. As it was feared that he had met with an accident a rescue party comprising the medical officer and the veterinary officer of the Governor's party set out fully equipped to render First Aid. To their relief the party came upon the forest officer unharmed and returning to camp with the dead leopard. The Governor's Special left Pidaung Station behind schedule. Officers from Myitkyina District who were left behind in camp found the steaks served up at dinner to be tasty, and only learnt afterwards that they were leopard meat!

Returning late from Mogaung one evening the Superintendent of Excise (U Tha Aung) noticed an animal racing alongside his jeep as he was driving along the Stilwell Road inside the sanctuary. He turned round to look and to his surprise found the animal to be a leopard.

On the 25th April 1951 at about dusk, a young cow elephant charged the up-passenger train between Mayan and Pidaung railway stations. The cow elephant received serious injuries and was destroyed the following morning.

Elephants from the sanctuary raided the standing paddy crop in Pamadi tract on two or three occasions and one of them trampled a hut in which a cultivator was keeping watch.

Two bull bison were shot inside the sanctuary, one by a Kachin from Mayan with the rifle issued for village protection, and the other also by a Kachin from Kabaw Kataung with an American rifle.

<sup>1</sup> A lair is an open grassy plain usually undulating and often quite a small area surrounded by forest.

The Government rifle was withdrawn and the private American rifle confiscated.

In spite of my instructions to prosecute the two culprits in the Criminal Court, the late Divisional Forest Officer closed the two cases on the report of the Range Officer that the culprits were not traceable. From the girth of the two horns, 18" in both heads, it is evident that there are still a fair number of big bulls inside the sanctuary.

Two bullocks were killed by tigers inside the sanctuary. A family of four tigers—a tiger, a tigress and two full-grown cubs—killed a number of cattle in the Pamadi tract. The Nepali headman of Pamadi shot one cub over a kill in September 1951. It is probable that the same family killed the two bullocks. One tiger was trapped by villagers from a Nepali village in January 1952 and destroyed. One leopard was also shot near Kabaw Kataung village, outside the western boundary of the sanctuary during 1951, by the Kachin who shot the second bison.

Due to shortage of salt during the Japanese occupation, villagers camped near Loipyit salt lick and boiled salt out of the saline earth. The American army set up a saw mill on a ridge close to Hopak salt lick. The converted timber was conveyed in motor lorries from the saw mill on to the main Stilwell Road. Both salt licks are now abandoned by big game. Motor vehicles passing up and down the Stilwell Road both day and night could also be heard from Hopak. There are still a few hog-deer and sambar in the area. Hopak leirs is admirably suited for the introduction of thamin. Saw Ze lick in this sector, Kyanan, Manaw and Maw Raw licks in the northern sector are visited by elephant, bison, teeing, sambar and hog deer regularly.

During the war period, the Army authorities put up 'NO SHOOTING—NO FISHING' notice boards, one at Nankhwi Bridge on the old P.W.D. road from Myitkyina to Mogaung and one at Mile 13/4 on the Stilwell Road. Unfortunately this did not seem, in any way, to deter the Army personnel from wholesale shooting of game inside the sanctuary. On re-occupation, there was considerable poaching both by members of the Armed Forces and the civil population.

Poaching was rife when I arrived in the District in March 1951, but by enlisting the cooperation of the Officer Commanding, 1st Kachin Rifles, Battalion Commandant, U.M.P., headmen and elders of the villages in the neighbourhood of the sanctuary, bringing up the game staff to pre-war strength and maintaining two gates—one at Mile 11/0 and one at Mile 22/4—Mayan railway crossing on the Stilwell Road we succeeded in suppressing poaching completely by the middle of 1951. Salt was regularly put down in the salt licks and game started to appear in the many leirs and salt licks when I left the district in February 1952.

March 1952-September 1953. Soon after my return from Myitkyina, the Kachin Rifles were replaced by the Kayah Rifles. The Battalion Commandant, U.M.P., a keen conservationist, was recalled to the Army. The Chief Works Officer as well as the District Superintendent of Police who cooperated whole-heartedly in my humble efforts proceeded on leave, and on the expiry of the leave returned to the Union Government.

There was also a change in the Kachin State Government. This was followed by a wave of serious crime in the Myitkyina District. Frequent poaching by parties of Army, Civil Police and Union Military Police personnel in motor cars was detected by the game staff and reports made to the Deputy Commissioner, but no action was taken to stop it. A bison was shot about half a mile from Kason Chung Forest Rest Hut. The culprits were not apprehended. Kason Chung is close to Nankyin village. Two assistant game keepers reside permanently in Nankyin village.

The new cantonment is now located near the sanctuary. Without the co-operation of the Officer Commanding, we will not be able to stop poaching. Game is often driven out from the sanctuary and shot outside.

October 1953 - June 1954. A Divisional Forest Officer, interested in game preservation, in the person of U Maung Gale, was selected and sent to Myitkyina. Immediately on his arrival in the division in August 1953, he tried his best to effect improvements in the rehabilitation of the sanctuary. Before his work was half completed he was taken away on deputation with the Agricultural and Rural Development Corporation. Three Kachins were prosecuted for shooting a bison within the Sanctuary. The Court sentenced each of the Kachins to four months rigorous imprisonment. The headman of Nankyin village was prosecuted and fined Kyats 100 for cutting taungya inside the sanctuary. Four armed guards were added to strengthen the existing game staff of 6 game keepers. Roads were repaired so that they would be jeepable during the open season. Salt was deposited at all salt licks regularly. Poaching had almost ceased within the sanctuary. Game can now be seen in increasing numbers at the same licks. It is now left to the succeeding Divisional Forest Officers to accomplish the task of bringing back the sanctuary to its pre-war conditions.

The following statement gives a rough idea of the existing depleted stock as compared with pre-war stock. All that is done at present to estimate the stock of game is for the game establishment to prepare monthly and annual statements of game seen. These statements cannot be considered to be an accurate estimate of the actual number of the different species in the sanctuary:

Kind of Animal	Animals counted	Animals observed				
		1936-37	1948-49	1949-50	1950-51	1951-52
Elephant	290	63	22	22	24	35
Bison	360	37	39	53	42	45
Tasing	290	14	20	18	15	12
Hog-deer	509	4	5	5	13	32
Sambar	250	15	20	21	18	25
Barking-deer	150	3	7	5	9	8
Tiger	12	—	3	2	2	3
Leopard	10	—	—	2	2	1
Bear	20	1	—	1	3	2
Wild dog	40	1	1	2	3	4



There are two small herds of bison, one of twelve animals with two calves, and one of eight animals. The stock of tsaing consisting of a small herd of five animals is concentrated in the northern sector near Pyawbwe laon. If we could completely stop burning of charcoal in the area, both bison and tsaing which have now taken to the hills might re-appear. From the report for the year ending 30th September 1953, it appears that the hog-deer from the adjoining unclassified forests have come into the sanctuary. There may be more barking-deer than the figures given in the annual statements. On my way to Nanti one afternoon I came across no less than three barking-deer. Mr. J. N. Martin the chief works officer and his wife observed a barking-deer standing by the side of the Stilwell Road. A barking-deer is also regularly seen between Maysan and Pidaung stations by passengers travelling in the up-passenger train. The figures for elephant, bison, tsaing and sambar may be considered as very nearly correct.

**Namkyin Village.** It is understood that the establishment of this village on the right bank of the Namkhwi Kha, was permitted by the Deputy Commissioner, Myitkyina, about the year 1932. The site falls inside the sanctuary. There are 12 households, 7 bullock carts, 9 pairs of bullocks, 4 buffaloes and 10 other head of cattle. The villagers who are all Kachins earn their living by burning wood charcoal inside the sanctuary and marketing same in Myitkyina town. It would be a problem now to shift this village.

The sanctuary is in the Kachin State and the attitude of the Kachin State Government is not known. If the sanctuary is to be rehabilitated it is essential to shift this village from inside the sanctuary.

**Namsø Reserve.** With a view to extending the Pidaung Sanctuary to the south, settlement of 58 sq. miles of good game country to constitute the Namsø Reserve was carried out in 1937 and notified in Department of Agriculture and Forests Notification No. 514 dated the 30th November 1939 with effect from the 1st February 1940.

At the time of evacuation in 1942, plans were afoot to add this reserve together with Uya-Hatha Reserve, Kawan Reserve, and all the intervening unclassified forests. This contemplated addition to the Pidaung Sanctuary was well stocked with elephant, bison, tsaing, hog-deer, sambar, barking-deer, peafowl, partridge, pheasant and white-winged wood-duck. The large open grass plains in the area make it very suitable for further development into a place where wild animals and birds can be easily seen. If this projected extension can be accomplished a sanctuary of approximately 600 square miles (including the existing Pidaung) will be brought into being.

Soon after his arrival in the Division U Mzung Gale, the Divisional Forest Officer, took up the question of rehabilitation of this sanctuary and submitted proposals in May 1954. The proposals are now being examined in Rangoon and it is hoped that early orders will be issued for the settlement of the proposed extension.

The sanctuary can be developed into a National Park in a short time and it would be an asset not only to the Kachin State but also to the Union Government.

The Hon'ble Thakin Kyaw Tun, Minister for Agriculture and Forests, accompanied by U Thein, Conservator of Forests, Northern Circle, visited the sanctuary in the course of his tour in December 1958. The interest taken by the Hon'ble Minister is deeply appreciated.

## TAUNGGYI GAME SANCTUARY

Year of notification	... 1st March 1930.
Area in square miles	... 6.2.
Forest division in which situated	... Southern Shan States.
Species for which the sanctuary is primarily constituted	... Birds and barking-deer.

This sanctuary was notified under the Shan States Game Rules, 1929, in Ministry of Forests Notification No. 13 dated the 22nd January 1930 with effect from the 1st March 1930. It is situated in the Shan States.

The sanctuary is more of a wild bird refuge than a game sanctuary. It was well stocked with birds and contained a few barking-deer before the War. As the sanctuary is practically surrounded by a densely populated area and is extremely accessible, poaching unquestionably takes place in spite of vigilance by the forest staff.

The Principal Forest Officer, Shan States, writes, 23rd March 1954: 'The Taunggyi Sanctuary has been greatly disturbed owing to proximity to villages and difficulty in control. There may still be about half a dozen gais<sup>1</sup>. I gather that there are also a few leopards which prey on dogs from houses adjoining the reserve.'

## KAHILU GAME SANCTUARY

Year of notification	... 1st September 1928.
Area in square miles	... 62.
Forest division in which situated	... Thaton
Species for which the sanctuary is primarily constituted	... <i>Dicerorhinus sumatrensis</i> , serow, sambar, barking-deer, mouse-deer, hog-deer and junglefowl.

This sanctuary was notified in Ministry of Forest Notification No. 188 dated the 9th July 1928 with effect from the 1st September 1928. It is situated in the Pa-an Township of the Thaton District and the Papun Township of the Salween District.

*E. sondaicus* was once fairly plentiful in several parts of Burma, and was realised as being in danger of becoming very rare early in the present century. But it was not until about 1927, partly as a result of the activities of Thai poachers near the Sittaing River, that the Forest Department became seriously alarmed and decided that special measures would be necessary if the species was to be saved from extinction. Unfortunately this sanctuary was established too late. A thorough investigation of this sanctuary conducted in 1939 by the late Theodore Hubback showed that at least some of the rhinoceros

<sup>1</sup> Barking-deer.

inhabiting it belonged to the Sumatran (two-horned) species, [*Oryx*, vol. 2 (8), pp. 145-146, November 1953].

In 1939-40, the Game Warden (F. J. Mustill) obtained definite evidence regarding the species as an excellent view and photos of a rhinoceros in its wallow were obtained at very close range. The animal was undoubtedly of the Sumatran species and its track was the largest measured in the sanctuary.

In 1940-41 the Game Warden (C. E. Milner) stated that the rare *Rhinoceros sondaicus* no longer existed here.

The Divisional Forest Officer, Thajon (August 1946) in answer to an enquiry informed Mr. W. F. H. Ansell 'that there is at least one family of rhinoceros in the Kahilu Sanctuary and that tracks of two were recently seen' [*JBNHS*, vol. 47 (2), p. 249, December 1947].

*Extracts from Report on Forest Administration in Burma.*

1946-47. 'Tracks of two *Rhinoceros sumatrensis* were reported seen in the sanctuary'.

1947-48. 'A *Rhinoceros sumatrensis* was reported seen occasionally'. Information later than 1948 is not available. The sanctuary is situated in the area at present under occupation by the insurgents (Karens).

Besides *Diceros kinnus sumatrensis* the sanctuary contains serow, hog-deer, mouse-deer, barking-deer and a few bison. This sanctuary falls within the recently constituted Kaw-thu-lay (Karen) Stae.

#### MULAYIT GAME SANCTUARY

Year of notification	... 1st January 1936.
Area in sq. miles	... 59.51.
Forest division in which situated	... Thaingyin.
Species for which the sanctuary is primarily constituted	... Barking-deer, pig, tiger, and leopard.

This sanctuary was notified in Ministry of Forest Notification No. 282 dated the 5th November 1935 with effect from the 1st January 1936. It is situated in the Kya-in Township, Kawkaireik Sub-division, Amberst District, on the western slopes of the Dawna Range and takes its name from the highest point in the area, namely Mount Mulayit (6,823 ft.). Mount Mulayit is a place of pilgrimage and the slopes of the mountains are uninhabited and likely to remain so.

This is the first of a series of sanctuaries constituted with the support of the Buddhist monks. In an area with such great range in elevation (6,823 ft. down to 1,200 ft.) the flora varies a great deal—from dense evergreen and moist deciduous forests to hill forest and open grass slopes on the highest slopes. There is therefore much variety of food for herbivorous fauna. The streams are all perennial and there are plenty of fish in the deep pools which occur. The climate is wet with a rainfall of probably more than 200 inches per annum. This sanctuary was originally thought to contain rhinoceros, but so far their presence has not been either proved or disproved. Tracks of a rhinoceros believed to be *R. sondaicus* were seen on the Dawna Range at 6,822 ft. (1929-30). The probability is that specimens may wander there from time to time. The sanctuary was last visited in 1946-47 by the range officer who found tracks of bison, mouse-deer, sambar, barking-deer, pig, bear, tiger and leopard.

A detailed faunal and floral survey is necessary. The area is at present under occupation by insurgents (Karens and Mons), and falls within the newly constituted Karen State.

## SHWE-U-DAUNG

Year of notification	... 1918.	
Area in square miles	... 126.	
Forest division in which situated	... Katha East,	
	Burma.	81
	Mong Mit,	
	Shan State.	45
Species for which the sanctuary is primarily constituted	... <i>Diceroshinus sumatrensis</i> , elephant, bison, tsaing, sambar, serow, barking-deer, pig, tiger, leopard, bear, penfowl, junglefowl, pheasant, partridge, and quail.	126

81 sq. miles of the Shwe-U-Daung Reserve lying in the Mogoke and Thabeikyin Sub-Divisions of the Katha District was originally notified as a Game Reserve in 1918 and declared as 'The Shwe-U-Daung Game Sanctuary' in Forest Department (Ministry of Forests) Notification No. 243 dated the 29th September 1927. 45 sq. miles of the Shwe-U-Daung Reserve lying in the Mongmit State was declared as 'The Shwe-U-Daung Game Sanctuary, in Forest Department—Notification No. 138 dated the 22nd July 1929 with effect from the 1st August 1929. An account of this sanctuary by E. H. Peacock has previously been published in 1931 [*JRNHS*, vol. 35 (2), October 1931].

The sanctuary contains all species of animals indigenous to Northern Burma with the exception of thamin, goral and hog-deer and many of these can be observed on the open grassy hill slopes found at high elevations within the sanctuary. The scenic value of the sanctuary is said to be almost unequalled within the Union, many of the hills within it being over 5,000 ft. above sea level. The Shwe-U-Daung Hill from which the sanctuary takes its name rises to an altitude of 6,222 ft.

In 1939, this sanctuary was visited by the Conservator of Forest, Northern Circle, the Game Warden and the Divisional Forest Officer, Mong Mit Division. It was then estimated that the sanctuary contained from twelve to fifteen specimens of *Diceroshinus sumatrensis*. Sambar could be seen at any time of the day on the open grassy slopes, which are the most distinctive features of this sanctuary. Elephants are extremely plentiful. In 1940, no casualties among the *D. sumatrensis* were reported. The Game Warden (Mr. Mustill), who visited the sanctuary during the year, was struck by the diminution in numbers of sambar which live almost permanently in the open grass country along the higher ridges. Elephants abound in the sanctuary.

The higher slopes were inhabited by several species of pheasants. The Game Warden was able to identify the Burmese Barbeeked Pheasant. The Arakan Hill Partridge was also identified. Since then, the sanctuary was last visited by the Divisional Forest Officer, Mong Nit Division (E. A. P. Reynolds), in April 1948. He did not see any *D. sumatrensis*, but saw fresh tracks of one and a month-old spor of a cow with a calf at heel. The Range Officer, who visited the sanctuary in May 1948, saw a *D. sumatrensis* in a mud wallow.

The Range Officer found old poaching camps in the Tonka drainage (Mong Mit Sector) dating from Japanese days. There was definite indication also that poaching had been going on from the Burma side. After sifting available evidence, the Divisional Forest Officer concluded that despite poaching there were approximately 4 to 5 specimens of this rare animal surviving in the Mong Mit Sector of the sanctuary.

The Divisional Forest Officer counted thirty sambar feeding on the grassy hillocks and knolls of Namadaungyi between 4,500 and 5,000 ft. contours one morning. A forester of the party while clearing paths saw three tigers, two Himalayan bears, a herd of elephants and a small herd of bison.

There is a local legend that the best time to come across rhinoceros is during the full moon of Waso (July) when they usually congregate together.

1949-50: Due to very insecure conditions prevailing in the immediate vicinity of the sanctuary, the Divisional Forest Officer was unable to visit the sanctuary. The terrain affords an ideal hiding ground for poachers, and fears were entertained that some of the animals in the sanctuary had been disturbed.

1950-51 and 1951-52: Nothing of importance was reported. But the writer was informed by a gazetted officer of very senior rank that three rhinos had been shot inside the sanctuary—one under a special permit issued to the Maha Devi of Mong Mit for medicinal purpose, and two illicitly by the Shan hunters who were entrusted with shooting the first. The circumstances which led to the issue of the special permit were:—

(1) A physician prescribed the Maha Devi to take rhino blood bath.

(2) A male *D. sumatrensis* was shot inside the sanctuary by Game Warden (E. H. Peacock) in October 1950 under the direction of the then Local Government for museum purposes.

Present-day conditions are quite different. The Game Warden (E. H. Peacock) writes in February 1951:

'The destruction of this animal is less to be deplored than might be apparent, as there are fully ten other rhinoceros living in the sanctuary under conditions ideal for their continued existence and increase.'

The few surviving specimens are constantly harassed by poachers. The sanctuary is often disturbed by the presence of insurgents inside its boundaries.

The legend that the mountain spirits of Shwa-U-Daung do not like poachers is no longer heeded by the people resident in the neighbourhood of the sanctuary.

## East Katha Sector (Burma).

1949-50. The Divisional Forest Officer, writes:—

'Owing to continued lawlessness in the Thabeitkyin Range, it was also not possible this year for the writer to carry out a survey of the game in this sanctuary. Tracks of rhino were rarely seen according to the report from the Range Officer, Thabeitkyin. As no poaching could be prevented under existing conditions of lawlessness, the number of rhino present will not be more than a couple if any exist at all in the sanctuary.'

1950-51: Not possible for any gazetted forest officer to visit the sanctuary. The Range Officer, Thabeitkyin, reported one male, one female and one calf rhino as existing in the sanctuary.

1952-53: Owing to the presence of insurgents in the area, it has not yet been possible for the Divisional Forest Officer to visit the sanctuary. From enquiries conducted by the Range Officer, Thabeitkyin, it is learnt that three rhino (one male, one female and one calf) are surviving in the thick jungles in the upper reaches of Shwe-Hyar Chaung.

'It will be necessary in the interest of game to post a Deputy Ranger and two foresters to the Sagsaung beat in the near future for effective patrolling of the Game Sanctuary—at present there is only one forester.' [Annual Report on Forest Administration, Mong Mit Division (1947-48)].

No action appears to have been taken on the above recommendation.

Two trial lines for finding the best route to the upper slopes of Shwe-U-Daung were cut in 1938. The routes may be re-surveyed when local conditions permit.

## KYATHIN WILD LIFE SANCTUARY

Year of notification	... 1941.
Area in square miles	... 104.
Forest division in which situated	... Shwebo.
Species for which the sanctuary is primarily constituted	... Thamin.
Establishment	... One game keeper.

This sanctuary was notified in Department of Agriculture and Forests Notification No. 177 dated the 19th June 1941 with effect from the 1st September 1941. It is situated partly in the Kawlin Township of Katha District and partly in the Kanbala Township of Shwebo District. It was primarily constituted for thamin. Its constitution is a departure from all existing ideas concerning sanctuaries in that, for the first time, villages are included inside the sanctuary. Co-operation of the villagers is to be enlisted by offering to pay compensation for damage to their crops by the wild animals. The suggestion made at the time of the constitution is that compensation would take the form of paying the Land Revenue for the villagers in return for which the villagers would be asked to co-operate in preserving the fauna in the sanctuary.

Apparently this new idea, has been overlooked by Forest Officers concerned. The Conservator of Forests, Northern Circle, has not made any comment on this new idea in any of his annual reports (1945-46 to 1950-51).

This sanctuary includes an area of swamp which will form an excellent bird sanctuary. The whitewinged wood-duck and whistling teal breed in the area whilst there are many other species of water fowl, which live here permanently. In 1937, the area proposed for constitution as a sanctuary was estimated to contain 150 head of thamin. In 1945-46 the Conservator of Forests, Northern Circle, reported that the number of thamin had been reduced to one-third of the pre-war number. This would mean that there were about fifty thamin in 1945-46.

The number increased to eighty in 1948-49 and to one hundred and fifty in 1951-52. This sanctuary is situated in Thaw Range. The number of thamin in Thaw Range was estimated as 600 to 700 in 1952. Many animals from the unclassified forests had apparently taken up residence inside the sanctuary.

Tsasing and barking-deer are also reported. When proposals for constitution of this sanctuary were submitted in 1937 there was a herd of about fourteen tsasing in the area.

Note. The land occupied by the Burma Railways, Kyatthin-Yindaik Fuel siding where the siding passes through the Kyatthin Fuel Reserve and Kyatthin Extension Fuel Reserve, is included in the sanctuary boundaries as notified in Notification No. 177 dated the 19th June 1941.

#### SHWEZETTAW WILD LIFE SANCTUARY

Year of notification	... 1940.
Area in square miles	... 213.4.
Forest division in which situated	... Minbu.
Species for which the sanctuary is primarily constituted.	... Bison, sambar, thamin, and barking-deer.

This sanctuary which is situated in the townships of Sidoktaya, Pwinbyu, Sagu and Ngape of the Minbu District was notified as a wild life sanctuary in Department of Agriculture and Forests Notification No. 210 dated the 29th June 1940 with effect from the 1st September 1940. The sanctuary is within two hours' motor drive from Minbu and takes its name from the famous Shwezettaw Pagoda, a place of pilgrimage for Buddhists. This sanctuary and Kyatthin Wild Life Sanctuary in the Shwebo Forest Division were constituted primarily for the perpetuation of Thamin (*Panolin eldi thawia* Thomas) the deer typical of Burma. When proposals for constitution of this sanctuary were submitted in 1937 there were at least 100 head of thamin, some 40 head of bison and a few tsasing in the area. Thamin were reported to be on the increase and in 1946-47 and 1947-48, their number in the sanctuary was estimated at one time to be 850. The whole of Minbu District was, however, overrun by insurgents in 1948-49. Though Minbu and the riverine towns have since been re-occupied and are under civil administration of the Union Government,

the forest area including this sanctuary is still occupied by underground communists. The Divisional Forest Officer (U Ba Thaug) reported on 28 November 1948:

'Up till now thamin, though in reduced quantity, continue to exist and are found sparingly and sporadically. Quite a number have evacuated into the adjoining scrub jungles. Everywhere they are now seen in panic, and run away at a distance. No poacher will find it easy to bag them. It is believed that when the population has been harnessed and law and order has been restored thamin will return to their original homeland, and large herds of them will reappear again majestically.'

To my query the Divisional Forest Officer (U Aung Myint) replied in September 1953:

'I think the number of thamin in Shwesezlaw Wild Life Sanctuary is on the decrease due to heavy poaching during the Japanese occupation. Poaching is still going on during these days of insurrection as the area is still unoccupied by Government forces.'

## MAYMYO GAME SANCTUARY

Year of Notification	...	1918.
Area in sq. miles	...	89.91.
Forest Division in which situated	...	Maymyo.
Species for which the sanctuary is primarily constituted	...	Barking-deer, junglefowl, partridge, and peafowl.

Originally notified as a Game Reserve in August 1918 for the benefit of the public of Maymyo, this sanctuary was re-notified as 'Maymyo Game Sanctuary' in Ministry of Forests Notification No. 248 dated the 29th September 1927. The present boundaries of the sanctuary were revised with effect from the 1st November 1928, vide Notification No. 240 dated 17th September 1928. Prior to its constitution all wild life was rapidly being exterminated in and around the station, and it was so enable residents to see a certain amount of bird and animal life that the sanctuary was formed. As a result of 85 years of protection, the original stock of junglefowl and barking-deer had increased considerably and there was an excellent stock when the War broke out.

During the Japanese regime, villages around and inside the sanctuary expanded with the influx of refugees, and to cope with the shortage of food, *taungya* cultivation was carried out inside reserved forests without any restriction and though it was brought under control later, the lands already cleared and cultivated are no more suitable to be retained as reserved forests. Now, as there is genuine land hunger and as the disforestation of affected parts of the reserve is recommended by the Deputy Commissioner, Mandalay, action is being taken for dis-forestation, and as such the area of the sanctuary will be reduced by about 5,900 acres, curtailing the area available for occupation by wild life.

The situation of the sanctuary close to a popular hill-station like Maymyo—serves as a life-museum and could develop into a popular 'National Park' if steps are taken to educate the public in the appreciation of wild life. But so far, the sanctuary has suffered from



uncontrolled hunting by the people and the military personnel during the whole period of Japanese occupation, and the initial stages of British reoccupation<sup>1</sup>.

'Since the beginning of 1947, steps are taken to enforce the game rules and appeal made to military personnel is proving successful. Besides, the unsafe condition for any one to hunt in the sanctuary due to the activities of insurgents in 1948 kept the game reserve in the vicinity of Maymyo undisturbed throughout the year. Barking-deer exist in fair numbers, tiger, leopard, wild dog and wild cat are to be found in the sanctuary, and tracks are reported to have been seen in compartment 24, near Singaungale, Fbongdaw and Ye-gyan-oh villages. Junglefowl is distributed throughout the sanctuary, and peafowl can be seen near Nyaungni and Ye-gyan-oh villages during winter.' (Divisional Forest Officer, Maymyo. 10th January 1949).

'The appeal to the Military authorities for co-operation was repeated in May 1952. Tigers and leopards are much in prominence and occasionally lift dogs and goats from inside Maymyo Town.' (Annual Report 1952-53).

'In 1954 a leopard walked one morning into a bungalow in Maymyo while the owner was having his morning coffee, and was trapped inside and shot by a police officer who was called in.

#### MOSCOS ISLAND GAME SANCTUARY

Year of notification	... 1924.
Forest division in which situated.	... Tavoy.
Area in square miles	... 19.
Species for which the sanctuary is primarily constituted	... Sambar, barking-deer, and pig.

Originally notified as a Game Reserve in 1924 and declared as 'Moscos Island Game Sanctuary' in Forest Department (Ministry of Forests) Notification No. 243 dated the 26th September 1927.

It was hoped to be able to stock the islands with species which might ultimately become exposed to extermination on the mainland. With this object in view nine sambar, three barking-deer (all stages), four hog-deer, nine pigs and two junglefowl were released from time to time between 1924-1929. The Divisional Forest Officer, Tavoy Division, who visited the sanctuary in 1937 doubted whether any of the hog-deer or barking-deer, had survived. He suggested 'that the island is well suited for development into a seaside resort for Rangoon, being only a few hours' journey by sea-plane. Excellent sea bathing and sea fishing offer great attraction, and if such development takes place the establishment of a well-conducted wild life sanctuary on the islands would prove an additional asset.'

<sup>1</sup> On British re-entry administrative instructions were issued that the Forest and Game Laws were not to be enforced too strictly in consideration of the bad time the population had been through in the war years. In areas where touring is now possible, it is found that much game is destroyed by peace guerrillas, who misuse the ammunition issued by Government for local defence.

A pair of barking-deer and a young sambar (stag) were released in 1938 and 1939 respectively.

The Game Warden (H. A. Maxwell) who visited the sanctuary (1938-39) wrote:

'Of the indigenous fauna, the crab-eating monkeys are well represented. Hornbill and Imperial pigeons are also numerous, while there is a great variety of bird life, the study of which would require a prolonged stay on the islands.'

The Game Warden (F. J. Mustill) wrote (1939-40): 'Unless these islands are stocked with animals and birds imported from the mainland, there is little point in maintaining a sanctuary here.'

Of the animals released only the pig is established on the islands. Nine sambar and about 500 pigs were reported by fishermen in 1950-51.

The evergreen forests on the islands afford poor feeding, and clearings are required to provide suitable feeding grounds for any animals imported.

As the area is a notified sanctuary, all interference with wild life is prohibited. But collection of edible birds' nests and turtles' eggs is authorised. The Union Government may not be prepared to forego the revenue. The collection of edible birds' nests should at least be restricted. This is necessary for the preservation of the Grey-rumped Swifts (*Collocalis fuscica*) which are responsible for these nests.

The Deputy Commissioner, Tavoy, (U Kyaw Thant) who was consulted writes on 6th April 1954:

'I discussed it with the Divisional Forest Officer and since no Forest Officer had visited it during the past years because of the insurrection nobody knows the present position of the sanctuary. The island proves to be poor feeding ground, and it is very doubtful if it will become a seaside resort at all, because of the easier accessibility of Maungmagan beach. Maungmagan is only ten miles from Tavoy by motor car and there is very little danger of its becoming overcrowded. The Moscos, on the other hand is about 20 miles from Tavoy, and the communication is very poor and by fishing boats.

The right to collect turtle eggs during 1953-54 was sold for Kyats 150 and the right to collect edible birds' nests for three years 1951-54 for Kyats 141,000.

Pre-war the licensee paid Rs. 450 per annum for the right to collect the turtle eggs and sold them on the mainland at from two to three annas for ten.

#### WELTIGAN WILD LIFE SANCTUARY

Year of notification	... 1st September 1939.
Area in sq. miles	... 1.70.
Forest division in which situated	... Minbu.
Species for which the sanctuary is primarily constituted	... Many species of waterfowl.

This sanctuary which is situated in the Salin Township of the Minbu District was notified as 'Weltigan Wild Life Sanctuary' in Department of Agriculture and Forests Notification No. 275 dated the 5th July

1939 with effect from the 1st September 1939. The sanctuary consists mainly of lake and marsh land. At the time of constitution there were 33 resident bird species and 31 migrant species. The suggestion that the area be notified as a reserve emanated from Kan Kyung Sayadaw, the head of the monastery situated on the shores of the lake. The Sayadaw was strongly supported by the headmen of Hga-linbar, Sin-Kyon, Tamagyaung, Annuk-kanbaung and Shanzu village tracts. During the period of Japanese occupation, there was considerable poaching not only of the waterfowl but also of the fish.

The Divisional Forest Officer (U Ba Thauug) reported in November 1948: "The sanctuary is now reviving and the stock is on considerable increase, and at present it is in its early stage of rehabilitation. The advantage of its proximity to Salin, the Headquarters of the Civil Sub-Division, and also that of the Salin Forest Range, and co-operation of many good citizens with sense of civic duties help towards its success which appears to me to be promising".

But I learnt from the present Divisional Forest Officer (U Aung Myint) in October 1953, that the water in the lake is very low. He attributes the cause to the wholesale cutting down of catch trees in the insurgent occupied areas by villagers under permits issued by the insurgents. A senior forest officer with whom I discussed considers that on-the-spot investigation would be necessary to ascertain the actual cause, as the water in Maymyo Lake is also very low. There the cause is attributed to cracks in the earth surface caused by bombing during the war.

Rights and privileges granted as below:

<i>Particulars of holders.</i>	—	<i>Particulars of rights and privileges</i>
Owners of cultivation	—	To scare wild birds which are destroying crops but the use of fire-arms, catapults or any injurious weapon is not permitted.
The public	... (a)	To graze and water cattle without restriction.
	(b)	To collect lotus leaves, fruits and grass without restriction.

#### KELATHA HILL WILD LIFE SANCTUARY

Year of notification	... 1942.
Area in sq. miles	... 9.45.
Forest division in which situated	... Kado and Agency.
Species for which the sanctuary is primarily constituted	... Junglefowl and numerous species of birds.

This sanctuary was notified in Department of Agriculture and Forests Notification No. 9 dated the 12th January 1942 with effect from the 1st April 1942. The proposal for its constitution emanated from the leading monk of Kyaungtaya—Myathabeik monastery situated in the Kelatha Range of hills.

Besides junglefowl and numerous species of birds, barking-deer and serow are also benefited by the constitution of this sanctuary.

The sanctuary lies within the Kado and Agency Forest Division in the Bilin Township of the Thaton District but is placed under Thaton Forest Division for administrative convenience. At present it falls within the area occupied by the KNDO and KMT.

#### UNOFFICIAL GAME RESERVES

In the Southern Shan States there are eight unofficial game reserves in areas outside forest departmental control. Five reserves are situated in Yawnghwe State, two in Lauksawk State, and one in Kengtung States.

They were maintained by the Chiefs in the interests of wild life protection. All these reserves are frequented by large numbers of duck and waterfowl which together with the fish are protected by the Chiefs under the customary law. With the recent change in the administration of the Shan States, how these unofficial reserves will fare in the future is not known.

The Principal Forest Officer, Shan States, would alone be able to advise the Shan States Government as well as the Union Government. These reserves should be perpetuated and not allowed to lapse.

#### PROPOSALS FOR NEW SANCTUARIES

(1) In 1939-40, the villagers living round the Htu Lake situated two miles south of Irbin village, Myansung Township, Hensada District, requested that the lake which covers some 5 sq. miles may be formed into a sanctuary.

Preliminary notification was issued in the Department of Agriculture and Forests, Forest 11 Branch Notification No. 37 dated February 4, 1942. Its approximate area is 5.68 sq. miles.

With the present improved conditions in the area, the Divisional Forest Officer, Hensada-Bassein Division, may be appointed to be settlement officer in place of the Game Warden to fulfil the long outstanding request of the villagers.

(2) Proposals for formation of a wild life sanctuary in the Hlaing Yoma Hills Reserve of Insein Forest Division, comprising the Hlaing Yoma Hills, Wanetchaung and Kalitaw Reserves embracing the catchment area of the Rangoon water supply dam at Gyobye, were under consideration at the time of evacuation. It is felt that such an area which can easily be reached by car from Rangoon will, if developed, provide a very welcome source of recreation to the citizens of Rangoon.

(3) Notification proposing the Byingye Hill as a sanctuary in the interests of goral was issued in 1941. The area selected is situated partly within the Byingye Reserves of Yamejhin Forest Division and partly in the Shan States and covers approximately 12 sq. miles. The goral is practically limited to the three peaks of Byingye (6,254 ft.), Magon, (6,169 ft.) and Tinyudaung (5,959 ft.).

The constitution of this sanctuary would save the remaining accessible heads of goral in the Union from extermination. It is hoped that settlement of this sanctuary would be taken up as soon as the situation in the area returns to normal.

(4) In 1936, the Divisional Forest Officer, Arakan Division (Mr. Castens) suggested the Kyaukpandaung Hill as a suitable area for a sanctuary. He remarked as follows:—

'From many points of view this hill is a most attractive proposition as a Game Reserve. Though at present inaccessible it could be connected to Paletwa by a fair weather motor road with only one difficult stretch, that from Amataung to Tawsoik Sakan. This would bring it within two days' journey of Akyab and a minimum of three days from Rangoon or Calcutta.

'The hill forms a horseshoe-shaped plateau, the inner and outer rims of which are precipices. The plateau is covered with a type of hill evergreen with a number of *laies* along the outer (and higher) edge. A herd of bison is said to live permanently in the forest of the plateau and certainly at times grazes in the *laies*. Strangely enough, no sambar have ever been seen on the plateau, while elephants, though common on the lower slopes, do not often reach the top.

'The greatest attraction of the plateau, however, lies in the unrivalled opportunities it offers for the observation at close quarters of serow and more particularly goral. These animals graze freely on the open slopes below the outer precipice and can be watched for hours from the top. During my short stay I saw one serow and six goral grazing in the open, while other members of my camp watched a herd of about ten goral for a period of about two hours from a distance of about 40 yards.

'The scenery on the plateau is the most magnificent I have seen anywhere in Burma. Shooting serow and goral is limited to those slopes which can be reached by descent of the cliffs, which is possible only in one or two places. There is a limited amount of native poaching of serow, goral and bison.'

Apparently the above proposal has not been lost sight of, judging from the following remarks in the Annual Report on Forest Administration for the year ending September 30, 1946:

'A possible sanctuary for the protection of goral was previously suggested in Kyaukpandaung Hills, east of Paletwa in the Arakan Division. This area is very remote and protection will have to be left mainly to the subordinate staff.'

The proposed area falls within Chin Hills Special Division to which the Wild Life Protection Act, 1936, was extended in 1948. As remarked by the then Game Warden (F. J. Mustill), an area which affords opportunity of observing serow and goral at close quarters is certainly worth consideration. Byingye Hill sanctuary alone would not be sufficient for the perpetuation of goral. Settlement can also be carried out now.

The Chief Conservator of Forests as a member of the Chin Hills Development Committee, has undertaken along with the committee three fact-finding tours of the Chin Hills Special Division. It is therefore presumed that he has examined this proposal on the spot. The Chins are a law-abiding people. They are not likely to contravene the game rules when the area has been notified as a wild life sanctuary.