

A REPORT ON THE INVESTIGATION OF THE STATUS OF THE WHITE-WINGED WOOD-DUCK IN ASSAM AND RECOMMENDATION OF A SANCTUARY FOR ITS PROTECTION

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(With 3 Text figures and 1 plate)

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I—INTRODUCTION

The White-winged Wood-duck, *Cairina scutulata* (S. Müller), is reported to occur in India, Burma and Malayasian islands. Within India it ranges from the western districts of Assam (Goalpara, Kamrup, Darrang, Nowgong) to the eastern boundary of Lakhimpur District. The frequency of its occurrence increases from west to east.

In the latter part of the 19th and the beginning of the 20th centuries, this species was common in Lakhimpur and Sibsagar Districts and straggling to adjoining districts. Col. Graham (*see* Hume and Marshall, 1881) reported this bird to be quite common in Lakhimpur District. Baker (1908) stated that he collected as many as 30-40 birds during five years from Lakhimpur District. Baker (1929) further recorded a great many of these ducks from Sadiya. The population of the duck appears to have dwindled during the recent years since sportsmen and naturalists have made only stray records of a single bird or a pair. Some such records are Hutchinson (1949), of a single specimen in Manipur, Ali and Ripley (1948), a pair in Tezu and Brahamakund, and Gee (1958) from east of Phillobari, Dum Duma, 3 examples.

In view of the reported scarcity of the species during the recent years in Assam, the Indian Board for Wild Life proposed this species on the special protection list in 1952 and further in the meeting of the Bird Wing of the Board in 1956, the question of saving the species was raked up. The Indian Board for Wild Life recommended an enquiry by the Government of Assam into the present status of this species and on that basis to constitute a sanctuary for the bird. The Assam Government requested the Zoological Survey of India for assistance in this matter. A team headed by the author went for an investigation in February-March, 1961. The areas suggested by the Indian Board of Wild Life [*vide* Gee (1958)] for the possibilities of constituting a sanctuary in Lakhimpur District, and the suggestions of the Assam Forest Department, local sportsmen, tribal headmen and others were considered and a programme was chalked out accordingly concentrating the itinerary to the following forest blocks of Lakhimpur District :—

1. Upper Dihing reserve forest (West Block).
2. Upper Dihing reserve forest including Dum Duma R.F. (East Block).
3. Dibru reserve forest block.
4. Gali, Poba reserve forest blocks (North bank of Brahmaputra)

II—FINDINGS ABOUT THE WOOD-DUCK

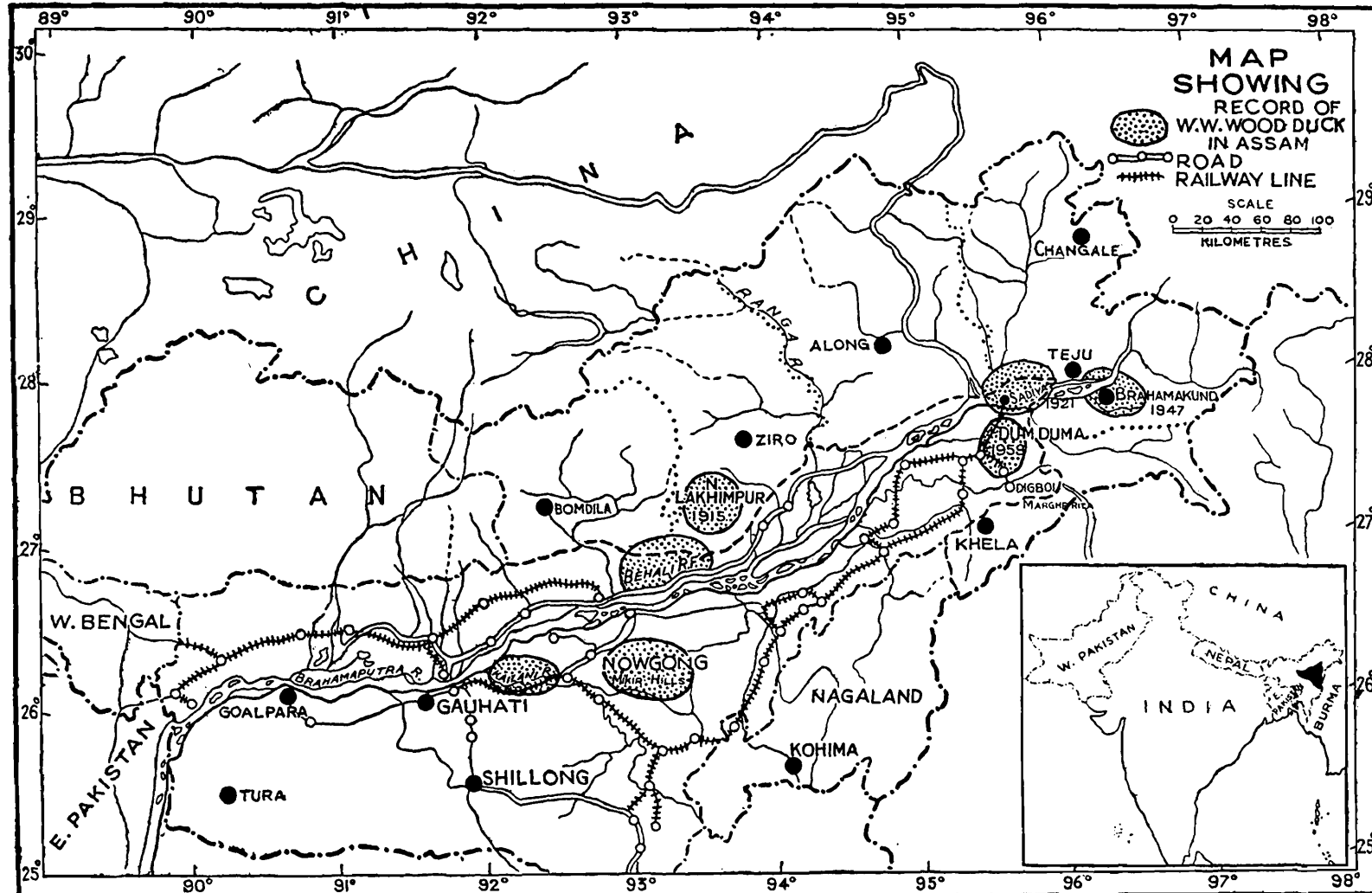
The White-winged Wood-duck was observed on two occasions after a very thorough search. A single example was seen taking to wings from the water of Namchik stream (Lat. 27°25', Long. 95°55'), Tinkopani, Namphai reserves in the Upper Dihing reserve forest (East Block). Another pair was met with within 5 Kilometres, N.E. of Puma Pathar in Digholi beel (Lat. 27°40', Long 95°20') in the Dibru reserve forest block at dawn. This pair was observed perched on a dead branch of a *Hollock* tree just at the edge of Digholi beel. On the north bank of Brahmaputra river about one kilometre interior of the Poba river mouth (junction of Poba river and Brahmaputra) a long drawn honk followed by a croak was heard disclosing its presence there.

III—STATUS, HABIT, HABITAT

The bird has no doubt become rare and may accidentally be met with either singly or in a pair at dusk or dawn in the dense swampy virgin forest areas in Lakhimpur District which are still unexploited and inaccessible. Such areas should be studded with beels, pools and sluggish creeks, canopied and shaded by forest trees and creepers and with a few dead stumps here and there. The water reserves should contain fishes, planktons and other aquatic organisms.

The bird is reported to frequent also standing crop cultivated round about forest villages and its visit is during the night time perhaps for feeding.

The village headmen say that the population of the Chinaha or Rajdeohans, (White-winged Wood-duck) has deteriorated to such a great extent within the course of the last 25 to 30 years that very rarely one comes



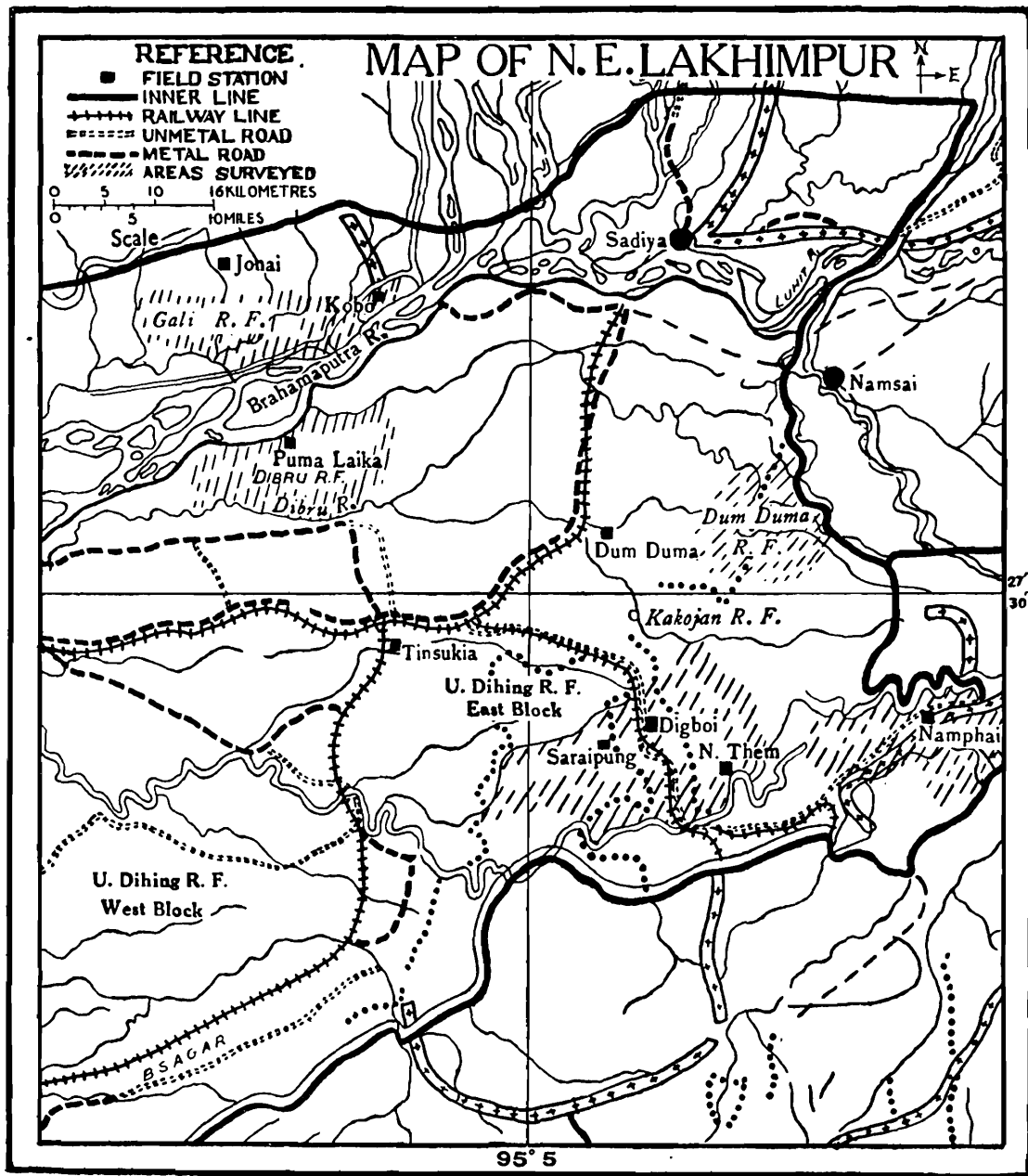
The Parliament has passed the necessary legislation for the creation of the State of Nagaland which will come into being from a date to be notified by the Government

TEXT-FIG. 1.—Record of White-winged Wood-duck in Assam.

across it. This bird was so common that in definite spots of forest one could get them without fail in waters of Buri-Dihing, Laikajan and Jonai (Murkog-Selek) rivers.

IV—PROBABLE CAUSES OF DEPLETION

There had been a lot of disturbances in the haunts of the bird during the recent past, primarily due to opening of forest areas for extension of



TEXT-FIG. 2.—*Map of N. E. Lakhimpur, showing the area surveyed to locate the Wood-duck and a possible site for a sanctuary.

agriculture, industrialisation and rehabilitation and changes in topography due to repeated earthquakes and floods since the year 1950. There also appears to be an increase in unauthorised shooting taking advantage of crop protection weapons and netting and poaching by tribal people who are quite ignorant about the rarity of the bird. It is reported by local

[*In the map for 'Metal Road' read 'Metalled Road' and for 'Unmetal Road' read 'Unmetalled Road'.]

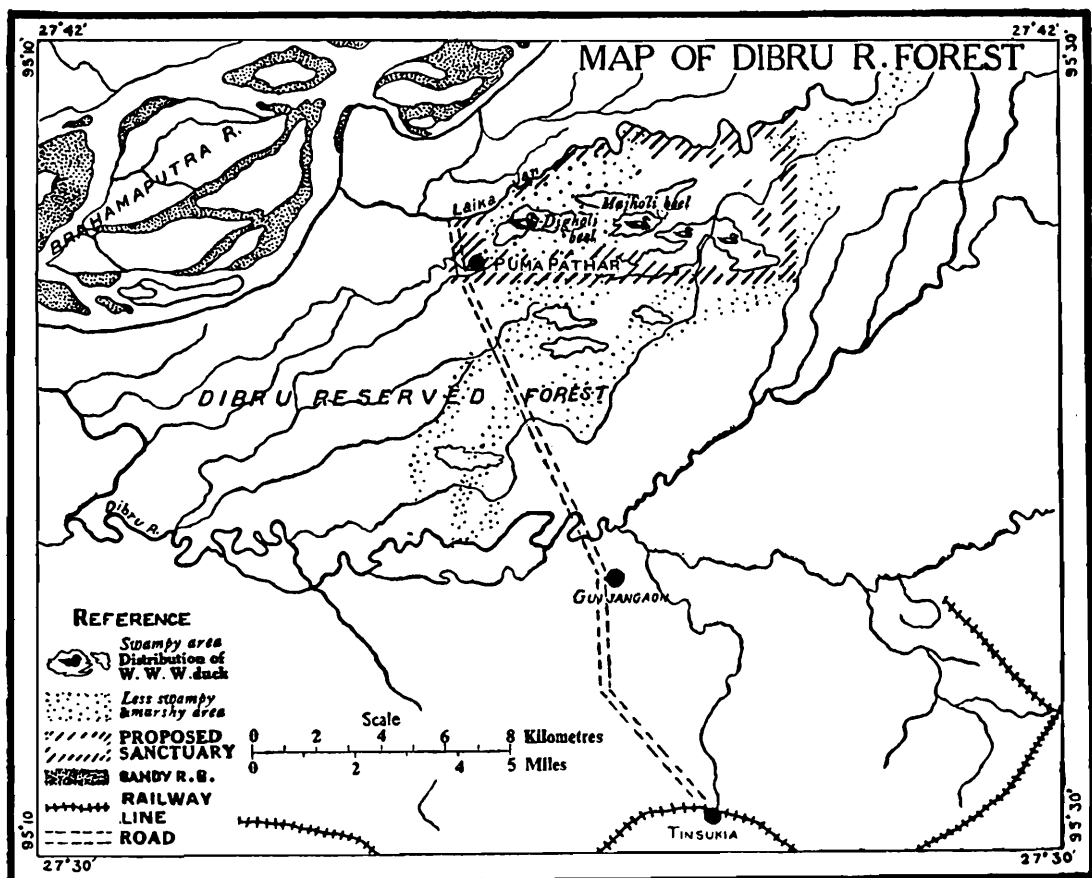
people that during the last World War, the military people stationed in Lakhimpur District took liberty to shoot without discrimination and the game suffered in their hands to a great extent and the White-winged Wood-duck could not perhaps stand the rigors and have been completely wiped out from certain areas and only in small pockets a few exist today.

V—SANCTUARY

After a careful consideration of the present status, probable reasons for depletion and ecological suitability for the bird in question, a sanctuary in the part of the Dibru reserve forest is proposed herewith.

(i) Sanctuary area

A part of the Dibru reserve forest block, approximately covering a marshy area of 30 square metres may be considered for the establishment



TEXT-FIG. 3.— Map of Dibru reserve forest, showing the site recommended for the sanctuary.

of the sanctuary. The area may roughly be demarcated in the map [based on the Survey of India map (1923-26)83 M] by Laikajan on the north and a straight line of 6 Kilometres parallel to 28°0', Latitude from Puma Pathar and then turning at right angle towards north to meet the Laikajan river. The area thus would be defined approximately between Lat. 27°38·5' and 27°41·0' and Longitude 85°18·5' and 95°22·0'

The whole area is marshy and contains several stagnant pools of which three beels, *viz.*, Dighal, Dighali and Majholi are worth mentioning. The nullahs (jans) which interconnect, do not flow properly as there is an upset in drainage due to series of earthquake and floods since 1950. As a result the swamps are on increase and a marshy flora is prevalent.

(ii) *Flora and Fauna*

The general flora as stated is marshy composed mainly of several species of canes and palms (*viz.* *Pinanga* sp., *Calamus* sp., *Livistonia* sp.), reeds and grasses (*viz.* *Ekra* sp., *kush*, *Saccharum* sp., and *Nal*, *Phragmites* sp.), thin and thick clusters of bamboos (*viz.* *Bambusa* sp., *Dendrocalamus* sp., etc.), undershrubs (*viz.*, *Phutukula*, *Melastoma* sp., *Tora*, *Alpinia* sp.), climbers on living and dead trees (*viz.*, *Derris* sp., *Vitis* sp., *Thunbergia* sp., *Dalbergia* sp., *Tinospora* sp.). In the vast stretches of water are found various hydrophytes among which the water hyacinth (*Eichhornia crassipes*) is the most common. The timber trees are not many but Hollock (*Terminalia myriocarpa*), Gondroi (*Cinamomium* sp.), Jarul (*Lagestroemia* sp.), Nahor (*Mesua ferra*), and Hingori (*Castanopsis* sp.) may be found occasionally.

The fauna is varied and it would be unnecessary to give a list of all the animals found in that area except those which may be considered as predators or competitors of the Wood-duck. Some may devour the eggs and lift the chicks and others may attack the adult birds. Among the carnivores mention may be made of the large and small civets, *Viverra zibetha*, *Viverricula indica* respectively, the fox, *Vulpes bengalensis*, the common otter *Lutra lutra*, the jungle cat *Felis chaus*. Among the birds, the osprey, *Pandion haliaetus*; the serpent eagle, *Spilornis cheela*; and crested hawk-eagle, *Haliaetus leucoryphus* are accused for destruction of the eggs and chicks. A mention may be made of the water monitor, *Varanus salvator*, which is said to catch hold of the adults while they are busy in collection of their morsel from water.

(iii) *Approach to the proposed sanctuary*

The west part of the sanctuary is easily approachable from Tinsukia by a metalled road, with a break at Guijangaon (forest beat office) where a ferry crossing is necessary to enter the Dibru reserve forest. One has to measure 16 kilometres by jeep in dry season to Puma Laika. During the monsoon the road is lost, the available transport is a boat or an elephant.

VI—MISCELLANEOUS INFORMATION

The following information about the White-winged Wood-duck was obtained from officials, public men and tribal heads and others.

1. Shri M. L. Saikhia, D.F.O., Assam State Forest stated that he obtained a live specimen from Shri G. K. Lahon, a forest contractor, who caught the bird from a paddy field during night time in a cleared forested area of Singpho (Lakhimpur District) in January, 1961. The bird was kept with other ducks and was behaving well but after a month it unfortunately escaped from captivity.

2. Shri B. N. Das, Working Plan Officer, Assam Forest had seen a bird in the Tirap river, Namsai area some 4-5 years back.

3. Shri Mohanlal, Conservator of Forest, Assam had seen the bird in Bokajan, Manipur Road area some time in 1944-45.

4. Shri P. D. Stracey, Ex. Chief Conservator of Forests, Assam, had met the bird twice on Borjan-Digboi Road in 1943-47.

5. Shri William Needham, Ex. Manager, Murkong Selek Assam Saw Mills and Timber Company, said that the bird was not uncommon some 20 years back in the northern bank of Brahmaputra of Lakhimpur District, but he has not come across any within the last 5-10 years.

6. Shri Chiniram Regon, President and Secretary, Mishin Kebong, observed very recently a pair in kampung beel, N. Lakhimpur.

7. Shri Lathoila Duania, the village headman of N. Them, said that a pair or two were observed in Tikeri (E. Lakhimpur District) by him in 1956-57.

8. Shri Golok Chandra Bharali of Salmora village, Sibsagar, caught a pair from Majholi beel, Moriani range, Sibsagar District, in 1953.

9. Shri Durga Dhar Lagasur, Contractor, Dibru Reserve forest, had seen this bird on several occasions in Dibru reserve forest during the last 15 years.

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