

Jaldapara Wild Life Sanctuary

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There are eight wild life sanctuaries in existence, at present, in the State of West Bengal, of which the Jaldapara Wild Life Sanctuary, with its splendid collection of wild life, occupies the pride of place. The sanctuary is situated within the limits of Alipour civil sub-division of Jalpaiguri district in the northern part of Bengal. The sanctuary constituted a part of the Buxa Forest Division at the time of its creation. The total area of the sanctuary is 10,474.40 hectares (25883 acres=40,000 sq.m.). This area is distributed over 9 Blocks namely—Hasimara, Jaldapara, Malangi, Baidabri, Mendabari, Bania, Chilapata, Tor and Salkumar. This sanctuary, though created primarily to preserve the famous Indian one horned rhinoceros (*Rhinoceros unicornis*), which inhabited the savannah forests of North Bengal, is rightfully rich in various other forms of wild life.

CREATION OF THE SANCTUARY :

During the early third of the present century, a deep necessity was felt by the then foresters of Buxa reserves to protect the grass-land fauna of the savannah forests of Chilapata and Malangi blocks, as the same was perilously heading towards extinction, with the extension of tea cultivation in these areas, and consequent shrinkage of the grass lands. In the early thirties, Mr. E. O. Shebbeare, then Conservator of Forests, was greatly concerned about the fate of the famous Indian one horned rhinoceros, inhabiting this tract. The animal, as he described, being "condemned to carry a horn worth half its weight in gold" and consequently, "bound to be a target for poachers". Accordingly he initiated a determined effort, with the help of a special patrol party headed by Mr. T. V. Dent, Assistant Con-

servator of Forests, to lay the poachers' hands off this precious asset of this tract.

Ultimately, in 1932, the Bengal Rhinoceros Preservation Act came into force providing for complete protection to this solo-horn pachyderm. It was only in 1940, that, this favourite haunt of rhinoceros was declared a "Game Sanctuary" under the Bengal Government notification No. 10694-For., dated 18th Nov. 1940, amended later through notification Nos. 10549-For., dated 13th November, 1941 and 5238-For., dated 3rd April, 1943. Subsequently, the Jaldapara Game Sanctuary Range was created in the year 1954, with the headquarters at Jaldapara, comprising the whole of Jaldapara Game Sanctuary. The idea was to entrust the management of this tract to a separate set of personnel, to be busy with the welfare and maintenance of the sanctuary alone. The sanctuary which constituted a part of the Buxa Forest Division at the time of its creation, came under the management of Cooch Behar Forest Division, with the creation of the latter in 1951. In the year 1959, the name of "Jaldapara Game Sanctuary" was officially altered to "Jaldapara Wild Life Sanctuary".

THE TRACT AND HIS VEGETATION

The tract is more or less flat, with a gentle slope from north to south, and is strewn with a number of perennial streams, which render the area suitable for permanent abode of various forms of wild life. The rivers Malangi and Tor run the East and the West of the sanctuary respectively. The average altitude is 76 metres (250 ft.) above mean sea level.

Major part of the sanctuary area bears a riverain forest, which conforms to Champion's subtype 6/1S-2 and contains *Khair* (*Acacia*

catechu). *Sissoo* (*Dalbergia sissoo*), *Simul* (*Salmalia malabarica*) interspersed in a sea of tall grasses. However, the savannahs of Chilapata and Malangi blocks come under champion's subtype 2S-7(b) of Moist Tropical forests. The common grasses which occur in the tract are *Saccharum procerum*, *S. ravennae*, *S. spontaneum*, *Phragmites karka*, *Rottboellia exaltata*, *Narenga porphyrocoma*, *Themeda arundinacea*, *T. villosa*, *T. quadrivalvis*, *T. strigosa*, *Neyraudia reynaudiana*, etc. Patches of dry mixed forests characterised by *Tatari* (*Dillenia pentagyna*), *Parari* (*Stereospermum chelonoides*), *Tanki* (*Bauhinia purpurea*), *Bahera* (*Terminalia belerica*), *Sidha* (*Lagerstroemia parviflora*), *Udal* (*Sterculia villosa*), *Gamar* (*Gmelina arborea*) etc. and wet mixed forests characterised by *Kainjal* (*Bischofia javanica*), *Chalta* (*Dillenia indica*), *Gineri* (*Premna bengalensis*), *Chatiwan* (*Alstonia scholaris*), *Jam* (*Syzygium cumini*), *Kawla* (*Machilus spp.*), etc. occur on stabler banks. *Sal* (*Shorea robusta*) occurs sporadically near the western border. However, the Salkumar block, belonging to the sanctuary, bears *Sal* (*Shorea robusta*) along with its usual associates

like *Sidha* (*Lagerstroemia parviflora*), *Bahera* (*Terminalia belerica*), *Udal* (*Sterculia villosa*), *Gamar* (*Gmelina arborea*), *Kawla* (*Machilus spp.*), *Gineri* (*Premna bengalensis*) etc.

FAUNA OF THE SANCTUARY

Besides the famous Indian one horned rhinoceros, which marks the principal interest, the sanctuary abounds in various other forms of wild life such as gaur, elephant, tiger, leopard, sambhar, hog deer, barking deer, spotted deer, swamp deer, pig, sloth bear, various species of cat and a rich and varied population of reptiles, birds and fishes.

While, it is extremely difficult to ascertain the exact number of individuals of each species of animal in the sanctuary, a comprehensive enumeration of the fauna was conducted by the Forest Directorate in May, 1964 (21.5.64). This gives a rough idea of the animal population of the sanctuary. The figures of enumeration conducted in May, 1964 and subsequent observations stand as below :—

1) Mammals :—

Common name	Scientific name	Number of individuals	Remarks
(1) Rhinoceros	<i>Rhinoceros unicornis</i>	72	
(2) Gaur (Indian Bison)	<i>Bos gaurus gaurus</i>	14 +	Includes calves
(3) Goyal	<i>Bos spp.</i>	6	Artificially introduced
(4) Elephant	<i>Elephas maximus</i>	2 +	Sometimes in herds of 10—20.
(5) Sambhar	<i>Cervus unicolor niger</i>	20	
(6) Swamp deer	<i>Cervus duvauceli</i>	4	
(7) Spotted deer (Chital)	<i>Axis axis</i>	11	
(8) Hog deer	<i>Axis procius</i>	141 +	
(9) Barking deer (Kalkar)	<i>Muntiacus muntjak</i>	188 +	
(10) Wild pig	<i>Sus scrofa cristatus</i>	88 +	
(11) Tiger	<i>Panthera tigris tigris</i>	2+	

Apart from those enumerated above there are plenty of other mammals like monkey (*Macaca spp.*), civet (*Viverra zibetha*), jungle cat (*Felis chaus*), leopard cat (*Felis bengalensis*), fishing cat (*Felis viverrina*), Jackal (*Canis aureus*), rabbit (*Lepus nigricollis ruficaudatus*), squirrel (*Petaurista spp.*) sloth bear (*Melursus ursinus*) etc.

During the year 1963-64, 6 Gayals (4 female and 2 male) were purchased and released among the wild gaur herd of the sanctuary. It may be

of interest to study the origin and exact status of this species. To quote from Mr. E. P. Gee's Wild Life of India :—

"The gyal is much the same as the "bison" or gaur in appearance, the chief difference being that the horns of the gyal are straight while those of the gaur are curved. They were at one time regarded as two distinct species *Bos frontalis* and *Bos gaurus*, but now-a days only the gaur is regarded as a wild species and

+ indicates that presumably there are more number of individuals of the species.



PLATE 56 - Elephant in Jalapara.

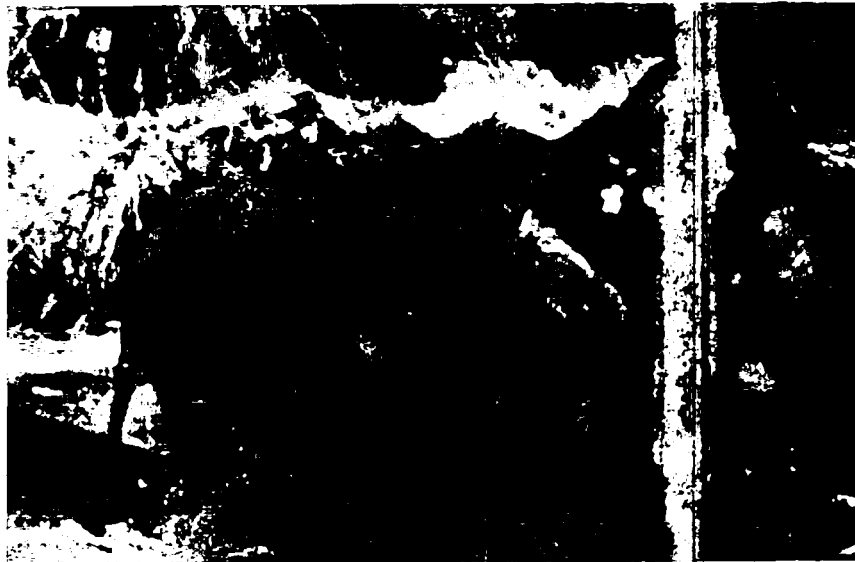


PLATE 57 - Wild elephants in the mid-day.

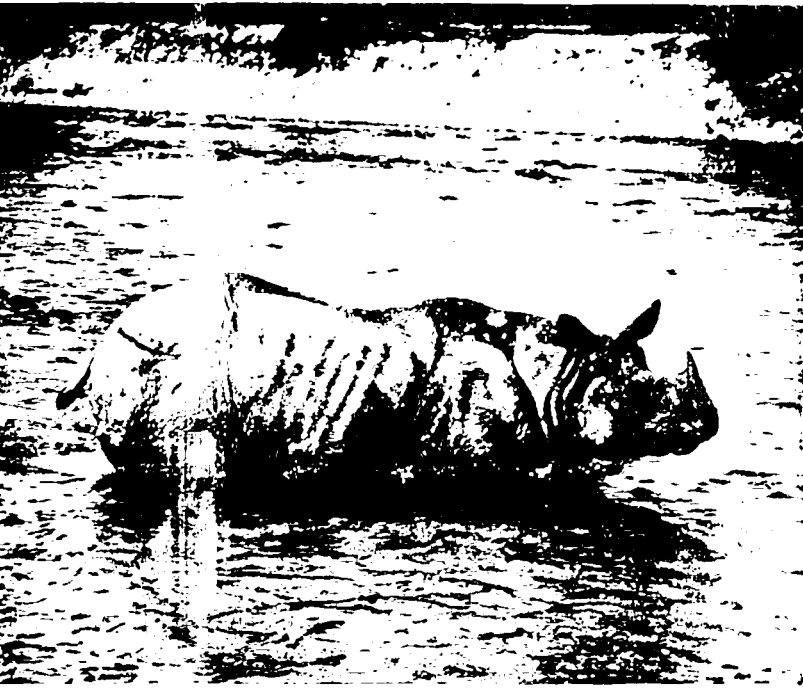


PLATE 58. Wading through
Torsa river, Jaldapara.



PLATE 59. A watchtower
in the Sanctuary.

the gayal is thought to be a domestic or domesticated animal. It would seem, then, that the gayal is either the domestic survival of an extinct wild species or else a cross between the wild gaur and the domestic cow—a hybrid which breeds true”.

(II) BIRDS :

During the enumeration, 91 peacocks (*Pavo cristatus*) and 115 jungle fowls (*Gallus gallus*) were noticed.

However, it may be mentioned here that the figures of direct enumeration of only a few species of birds are likely to bring about a sense of under estimate regarding the avian population. There are many more number of individuals of the two species mentioned above, together with an abundance of various other species of birds such as Wood cock (*Scolopax rusticola*), Pie (*Dendrocitta spp.*), Tit (*Parus spp.*), Nuthatch (*Sitta spp.*), Babbler (*Turdoides spp.*), Slatyheaded Scimitar Babbler (*Pomatorhinus schisticeps*) lora (*Aegithina spp.*), Chloropsis (*Chloropsis spp.*), Bulbul (*Pycnonotus spp.*), Redstart (*Phoenicurus spp.*), Flycatcher (*Muscicapa spp.*), Cuckoo-Shrike (*Carocina spp.*), Minivet (*Pericrocotus spp.*) Drongo (*Dicrorus spp.*), Tailor bird (*Orthotomus spp.*), Wren Warbler (*Prinia spp.*), Oriole (*Oriolus spp.*), Grackle (*Gracula spp.*), Swallow (*Hirundo spp.*), Wagtail (*Motacilla spp.*), Barbet (*Megalaima spp.*), Parakeet (*Psittacula spp.*), Bee eater (*Merops spp.*) Pied Kingfisher (*Ceryle spp.*), Horn bill (*Tockus spp.*), Hoopoe (*Upupa spp.*), Nighthjar (*Caprimulgus spp.*), Owl (*Bubo spp.*), Vulture (*Gyps spp.*), Fishing Eagle (*Haliaeetus spp.*), Imperial Pigeon, Green pigeon (*Treron spp.*), Dove (*Streptopelia spp.*), Emerald dove (*Chalcophaps spp.*), Peafowl (*Pavo spp.*), Quail (*Coturnix spp.*), Black Partridge (*Franccolinus spp.*), Cormorant (*Phalacrocorax spp.*), Cotton Teal (*Nettapus spp.*), Common Teal (*Anas spp.*), Grebe (*Podiceps spp.*), etc.

(III) REPTILES :

The sanctuary abounds in various kinds of snakes and big and small lizards. The snakes commonly found in the sanctuary are the enormous fangless Python (*Python molurus*), the Cobra (*Naja naja*), the King cobra (*Ophiophagus hamah*) Kraits (*Bungarus spp.*), Vipers (*Vipera spp.*) Cat

snakes, Common green whip snakes. Indian Rat snakes, etc. Among the lizards most common are Gecko (*Gecko verticillatus*), Monitor (*Veranus spp.*), Blood sucker (*Calotes versicolor*) etc.

(IV) FISHES :

The aquatic fauna of the sanctuary is also very rich, the species commonly noticed being *Labeo spp.*, *Barbus spp.*, *Callichorus spp.*, *Mucrones spp.*, etc.

HISTORY OF MANAGEMENT :

The forest areas within the limits of the present Jaldapara Wild Life Sanctuary, have been under the control of the Forest Department since 1866. For the period 1866 to 1875, however, no records are available regarding the management of these forests. A scheme of systematic management of these areas was outlined for the first time in 1874-75 by Dr. William Schlich, the then Conservator of Forests, in his administration report for the year. The Borojhar and Salkumar forests were declared reserves in 1876 and 1885 respectively and the Torsa reserve was declared as such only in 1923.

Mr. C. C. Hatt, in his working plan of Buxa reserves for the period from 1905-06 to 1919-20, prescribed selection felling to be backed up by natural regeneration, for these forests. However, the area coming within the present limits of the sanctuary remained practically untouched, being rather poorly stocked. Removal of thatch was the only significant operation carried out in these forests, with the exception of the Salkumar block, where some *Sal* (*Shorea robusta*) were removed under selection felling.

From 1910 onwards, extensive trials on artificial replacement of the valuable standing crop by planting *Sal* (*Shorea robusta*) and other valuable species were undertaken. Success in these trials accounted for Mr. E. O. Shebbeare's prescription of clear-felling followed by planting of *Sal* (*Shorea robusta*) in these areas under *Sal* Working Circle in his working plan of Buxa Division for the period from 1920-21 to 1928-29. In Mr. Shebbeare's plan, Salkumar, Barodabri, Bania and Mendabari blocks were taken up under *Sal* Working Circle, although only in Salkumar block 54.22 hectares (134 acres) were clear felled and re-stocked with *Sal* (*Shorea*

robusta), *Kainjal* (*Bischofia javanica*) and *Jarul* (*Lagerstroemia flos reginae*). The rest of the present sanctuary area was taken up under Stable Sissoo Working Circle and Unstable Sissoo Working Circle, selection removal of *Khair* (*Acacia catechu*) and *Sissoo* (*Dalbergia sissoo*), being the major operation in both these working circles. Under the prescription of clear felling of 1/40th of the total area followed by artificial regeneration, in the Stable Sissoo Working Circle, 103.60 hectares (256 acres) in Jaldapara block were planted up with miscellaneous species like *Sissoo* (*Dalbergia sissoo*), *Simul* (*Salmalia malabarica*), *Kainjal* (*Bischofia javanica*), *Gamar* (*Gmelina arborea*), *Toon* (*Cedrela toona*) etc., during the period. Excluding the felled patches, the present area under plantation in Jaldapara block is 98.74 hectares (244 acres).

It was only in 1929-30, that Mr. C. K. Homfray in his working plan for Buxa Division for the period from 1929-30 to 1948-49 laid stress on the maintenance and improvement of the savannahs, which used to shelter the rich grass land fauna of this tract. Under his plan, excepting removal of thatch and certain other minor forest produce, all cultural and other operations including early burning were stopped in the grassy savannahs, in order to maintain them in their natural state.

Grazing was totally banned. In Torsa and Jaldapara blocks removal of dry *Khair* (*Acacia catechu*) and *Sissoo* (*Dalbergia sissoo*), on a selection basis was prescribed in the riverain tracts. The rest of the present sanctuary area came under Sal Uniform Working Circle, under which another 96.32 hectares (238 acres) were clear felled and planted up with *Sal* (*Shorea robusta*) and its valuable associates in Salkumar block. Casual selection fellings together with dry felling at a 5 years cycle and fuel felling at a 20 years cycle were also prescribed. For the first time, at this stage, the possibility of creating a 'National Park' in this tract, "leaving aside the so called amenity forests" was conceived by Mr. Homfray, in view of the impoverishment of the grass land fauna, on account of shrinkage of grass lands, resulting in scarcity of land for such animals as rhinoceros, buffalo, swamp deer and even hog deer to live in.

In 1940, the tract was declared a Game Sanctuary. In 1945, in the fifth working plan of Buxa Division, a separate Game Sanctuary Working Circle was

constituted, comprising the entire game sanctuary excluding the Salkumar block, which continued to be worked under Sal Conversion Working Circle with a conversion period of 100 years. Under this set up, a further 48.56 hectares (120 acres) of the Salkumar block were planted up with *Sal* (*Shorea robusta*) after clear felling. Thus at the end of 1955, there were 199.10 hectares (492 acres) of plantation in Salkumar block, the 98.74 hectares (244 acres) of miscellaneous plantation in Jaldapara block remaining as such, so as to make the total area of plantation 297.84 hectares (736 acres) within the limits of the Sanctuary.

The object of creating a separate Game Sanctuary Working Circle was described as the preservation and improvement of the indigenous fauna. With the exception of sporadic felling of timber trees by departmental agency, all forms of exploitation oriented operations, including manufacture of *cutch*, were prohibited. To maintain the savannahs in their natural status and to enhance grass growth, control burning in alternate years together with removal of scattered evergreen trees invading the grass lands were to be carried out. Measures were also prescribed for eradication of *Eupatorium*, which is a serious pest in these forests. All forms of hunting and shooting were prohibited, but there was a provision to destroy wild dogs, otters etc., by foresters specially deputed for the purpose. Fishing with rod and line by license holders was permissible. Grazing remained totally prohibited. Measures for fire control and tending of plantations were also prescribed.

From 1951 onwards, with the constitution of the Cooch Behar Forest Division, the management of the Wild Life Sanctuary has been entrusted with the Divisional Forest Officer, Cooch Behar Division.

PRESENT SYSTEM OF MANAGEMENT

The principal object of management of the wild life sanctuary continues to be the same, namely preservation and improvement of the indigenous fauna. The entire scheme of management is oriented towards providing the most favourable living conditions for the indigenous fauna and to give maximum facilities to the visitors, intending to watch and study wild life in their natural habitat. With this in view, the

present scheme of management may be outlined as follows :

- (i) The Jaldapara Wild Life Sanctuary Range, which is in charge of a Forest Ranger, with headquarters at Jaldapara, has been divided into 9 beats, each in charge of a forester, with two forest guards under him. The location and names of these beats may be seen in the map.
- (ii) The sanctuary remains closed to grazing and all forms of forestry operations oriented towards exploitation.
- (iii) There are 12 firelines each 15 metres wide evenly distributed over the sanctuary area, and these cover a total length of about 32 k.m. These firelines are maintained clean by cutting and burning jungles every year to protect the area against accidental fires, and also to provide open space for the wild animals to move about freely or to bask.
- (iv) The tall grasses and reeds are annually burnt sectorwise all over the range, during the winter with a view to enhance growth of green soft grass, which is the staple fodder for the entire herbivorous population. This also helps in easy watching of wild life during the visiting season.
- (v) There are, at present, 12 glades in the sanctuary, of which seven are situated in the North-East Corner beat and the remaining five in the Jaldapara beat. Each such glade is provided with an artificially created salt lick, so as to attract animals for the tourists to watch without any difficulty. The salt licks consist of pits filled with alternate layers of earth and common salt, the same being renewed annually.
- (vi) Although the sanctuary area is drained

by a number of perennial streams, several wallowing pools have been artificially created at suitable places in the sanctuary.

- (vii) A well furnished tourist lodge has been constructed at BarodaBri, for the visitors to stay comfortably. Trained elephants are maintained by the Forest Department with a view to provide facilities for the visitors in watching wild life and for the scientific men intending to study wild animals in their natural environment.

CONCLUSION

It is really encouraging to note that with a patient and persistent effort the population of various kinds of fauna of the Jaldapara Wild Life Sanctuary is on the increase, and chances of the rare species of animals, inhabiting the tract, being extinct, are gradually receding. Even the population of the habitually slow breeding rhinoceros has grown considerably fatter during the last 25 years. Population of various kinds of deer has also increased perceptibly.

It makes no overstatement to say that the Jaldapara Wild Life Sanctuary has contributed immensely towards the growing need for the preservation of fauna of the State of West Bengal and perhaps will continue to do so in future.

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WEST BENGAL FORESTS



सत्यमेव जयते

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