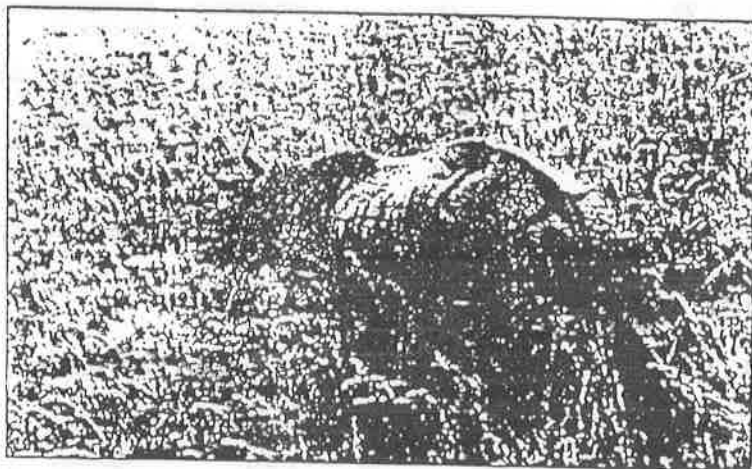


VACCINATING WILD RHINOS (*RHINOCEROS UNICORNIS*) AGAINST ANTHRAX AT JALDAPARA WILD LIFE SANCTUARY

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An Adult rhino at Jaldapara Wildlife Sanctuary

INTRODUCTION

Jaldapara Wild Life Sanctuary is well known for the presence of the Great Indian One-Horned Rhinoceros (*Rhinoceros unicornis*). The sanctuary is located in the flood plains of the river Torsa and other smaller rivers, which have created large tracts of grasslands sustaining a small population of one horned rhinos. This population is the largest any where outside Assam and Nepal. The Rhino population in Jaldapara sanctuary is a remnant of the erstwhile population inhabiting Indo-gangetic plains.

Jaldapara sanctuary is situated within the district of Jalpaiguri of West Bengal which is situated between the latitude of 25°58' to 57°45' in the North and the longitude of 89°08' to 89°55' in the east. Total area of the sanctuary is 216.51 Sq.Km. which has been divided into 46 Compartments for administrative purpose.

DETECTION OF ANTHRAX

Wild elephant herds frequently visit Jaldapara for food and cover. During the last part of January-February (1994), three wild tuskers died of Anthrax. The river Torsa, passing through Jaldapara sanctuary, was flooded during the end of July, 1993. All the carcasses were detected in the Torsa 2 & 3 Compartments of Bengdaki Beat of Jaldapara West Range. The first carcass was detected on 29.1.1994 at Torsa-II Compartment, the second was found on 3.2.1994 at Torsa-III Compartment and the third on 4.2.1994 at Torsa-II Compartment. Blood sample slides taken to

District Veterinary Laboratory, Jalpaiguri were confirmed for Anthrax. The presence of broken branches, ball of dung and disturbed ground indicated that the elephants had undergone considerable pain before death. These areas were cleaned and burnt.

All the dead tuskers were buried just after postmortem on the same spot, where they were detected. Six 12 X 12 X 12 feet pits were dug for burying. All the carcasses were cut into pieces and buried after adding lime, salt and bleaching powder. Later these areas were again burnt to destroy any remaining Anthrax spores. The area was with barbed wire fenced properly to check the entry of other animals.

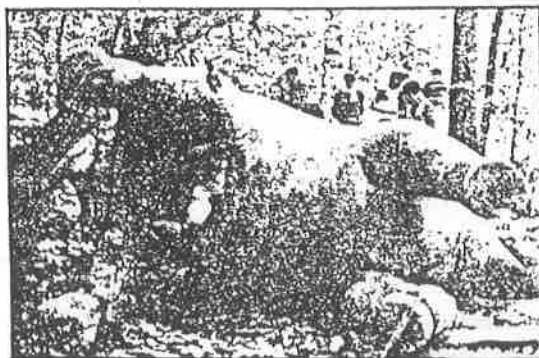
VACCINATION OPERATION

Vaccination of all the captive elephants (20 adults and 9 Calves) of Jaldapara Sanctuary was started on the 5th of February. Doses were 3 ml for adults and 1 ml for calves. One female with advanced pregnancy (Damayanti) and other two small calves were not vaccinated.

The rhino vaccination programme started on the 10th of February, 94 under the guidance of Chief Wild Life Warden, West Bengal.

It was decided to cover all animals, compartment wise. Calves below 2 years age and females in advanced stage of

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Carcass of an elephant which died of anthrax.

pregnancy were avoided. Three or four elephants were used per drive. Each elephant carried two persons (one for darting and the other for locating rhinos). The supervisor ensured that no rhino was darted twice. For this purpose each rhino, after being sighted, was closely observed to establish identity by sex, age (approx), distinguishing characteristics of cut marks, injury, shape and size of horn, age of accompanying calf, etc. A register was maintained to describe each rhino that had been darted, mentioning location, time and date of darting, distinguishing characteristics etc.

Vaccination dose was 1.5 ml per rhino. A suitable Rhino was located for darting in areas where vegetation is not too dense. Darts were prepared with Anthrax spore vaccine and kept ready before locating the animal. An extra dart was always loaded with the drug and kept ready in case the shot missed the target. All darts were fired fairly high in the hind quarters from a distance of 30-35 m ensuring that the target area is perpendicular to the line of flight of the dart.

It is the first incidence of Anthrax at Jaldapara Sanctuary and Rhino vaccination is also the first time in wild at Jaldapara.

Out of the total 35 rhinos present in Jaldapara, 24 were vaccinated. Remaining 8 were calves, 1 was in advanced stage of pregnancy, two were located but could not be vaccinated. (Table -1).

Out of total 24 animals vaccinated, 11 were males, 12 were females and one was unidentified. Eight of the nine calves identified during the operation were not vaccinated. One female in an advanced stage of pregnancy was not vaccinated.

All the captive elephants except pregnant females, mothers and suckling calf were vaccinated with anthrax spore vaccine. Cattle of nearby fringe villages were also vaccinated with anthrax spore vaccine.

Table - 1
Age and sex classes of Rhinos vaccinated at Jaldapara Wild Life Sanctuary with Anthrax spore vaccine

Age Class (Year)	Total Number	No. of Males.	No. of Females.	Sex Identified
0-5	9	1	-	8*
5-10	1	1	-	-
10-15	3	1	1	1
15-20	2	-	2	-
20-25	4	1	3	-
25-30	5	3	2	-
30-35	3	-	3	-
35-40	3	3	-	-
40-45	2	2	-	-
45-50	-	-	-	-
TOTAL	32	12	11	9

* not vaccinated as they are young.