

REPORT ON A SHORT MISSION TO UJUNG KULON NATIONAL PARK, JAVA, INDONESIA, IN CONNECTION WITH THE REPORTED DEATHS OF FIVE JAVAN RHINOS.

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On Monday 22 February 1982 reporter was invited to join an investigation-team that would depart the same day to the Ujung Kulon - National Park, to gather additional information on the deaths of wild and domestic animals that had been reported on by the park management and in the press in the previous months. The whole group consisted of experts from various institutions and was in fact composed of three different teams, one to give information to the people living around the park, one to investigate the disease and deaths of wild and domestic animals, and one to study the possibilities for the use of electric fences as a means to prevent further spreading of the disease.

The teams gathered on 22 February in Labuan and traveled the next day by boat to Tamanjaya, the park headquarters. On 24 February more detailed plans were made for the fieldwork and it was decided to split the teams, to be able to make a better coverage of the area. Reporter would go the Karang Ranjang area, on the southcoast of Ujung Kulon, where the dead rhinos had been found, and the other part of the team would go to the southeast corner of the reserve, Cegog and Cibadak, where they hoped to find diseased domestic animals. As it turned out the Karang Ranjang team consisted only of reporter and one PPA-guide, and the rest of the team preferred to go to the other area of investigation.

In the afternoon of 24 February reporter travelled by boat to

Laban and from there, crossing the narrow isthmus that connects Ujung Kulon with the mainland, to the guardpost Karang Ranjang. Because of the smallness of the team and because of illness of reporter, no extensive fieldwork could be done and the activities had to be restricted to a thorough interview with the Kepala Resort and the guards, who had found the dead rhinos.

On 26 February reporter walked back to Tamanjaya and travelled the next day by boat to Sumur and hence by car to Bogor. In Tamanjaya and Labuan the skeletons of the dead rhinos were studied.

THE GUARDS REPORT

During the interview of the Kepala Resort and the guards, it was found that they had made very careful observations and that they had given good attention to the circumstances under which the dead rhinos had been found. After finding the carcasses they had fenced them against scavengers and reported as quick as possible to headquarters. It is regrettable that the reporting of a very fresh carcass found close to the guardpost was not immediately reacted on by sending a helicopter with a veterinary team to the location.

Since 30 December 1981 five dead rhinos had been found. The positions of the carcasses are indicated on the accompanying map, based on the information of the guards who had found them. The first four carcasses were fresh or only a few days old when they were found, the fifth was much older and had only the bones left.

The descriptions given by the guards of the circumstances under which death had occurred are remarkably similar. Judging from the tracks all rhinos had been walking apparently normal, before they

fell over on the side and remained dead. There were no sign that the animal had fallen over before, had stumbled about or had tried to get up after it had fallen over on the side. The animal that died 3 January had scraped with its forefeet in the sand after it had fallen over. Three of the four dead rhinos had been browsing on Pandanus or other plants shortly before they fell dead: Apparently death had come very suddenly and quickly.

Three of the four had defecated shortly before death and the guards reported that the faeces was unusually thin. Two of them had left a whole trail of thin faeces, indicating a severe diarrhoea. For the rest the guards had not seen anything unusual on the carcasses, and the eyes, mouth and anus of the fresh carcass were reported to be normal.

The first carcass, a male, was found on 29 December 1981 and it was judged to be dead for about 5 days. It was found lying in the river Kalejctan, close to the beach, about 250 meters from the guardpost of that name. The animal came from the east through the forest and followed the river for some distance, browsing along the bank, before it dropped dead. No faeces were found.

The second carcass, a female, was found 3 January 1982, on the beach about 150 meters west of the Karang Ranjang guardpost. It had died only a short time before it was found. The rhino came from the west, walked along the beach for some distance, entered the forest and came again on the beach a little further on. There it browsed on Pandanus and two meters further it dropped dead. It had left a trail of thin faeces. The udder was swollen and milk was seen to drip from the nipples.

The third carcass, a male calf, was found 22 January 1982, 50 meters from the coast, about 1 kilometer west of Karang Ranjang. It was judged to be dead for about three days. It was an almost full-grown calf and the guards thought that it might have been the calf of the female that died 3 January. On 21 December they had seen a cow with a nearly fullgrown calf in the same area.

It came from west, followed the patroltrail for a short distance and dropped dead. There were no sign of browsing and about 5 meters before it fell a small amount of soft faeces was found.

The fourth carcass, a male, was found on 30 January, about 2 kilometer east of Karang Ranjang and about 50 meters from the coast. It was judged to be dead for about one week. On 24 January fresh tracks had been found there. About 50 meters before it fell dead it had browsed and it had left a trail of thin faeces.

The fifth carcass was found on 12 February by a survey team crossing from Cigenter to Cibandawoh. Only bones, horn and nails remained and it was judged to be dead for about one month.

The team that found the fifth carcass reported also tracks of a rhino that dragged with one of its legs. Later this track was followed for more than one hour by PPA-guards, but further along the track no more abnormalities could be seen on the prints.

In the same area also two dead banteng were found. The first on 30 January, about 70 meters west of the guardpost Cibandawoh. This animal was judged to be already dead for about 2 months. A much fresher banteng carcass was found in the upper reaches of the Cibandawoh on 13 February. This was judged to be dead for one week. Both were adult males.

CONCLUSIONS AND RECOMMENDATIONS.

The circumstances under which the rhinos apparently died - strongly suggest an infectious disease to be the cause of the deaths. Accidental or deliberate poisoning has been suggested as a possible cause, but that seems very unlikely. Poisoning five rhinos over a period of about one month would involve massive dosages of poison to be dumped in streams, wallows or on the vegetation, a feat that - would certainly have attracted attention otherwise.

It is also often suggested that there should be a connection between the disease that killed the rhinos and the disease that has been reported to have killed domestic animals in the surroundings of the park. In fact the only connection is that both happened simultaneously. If both rhinos and domestic animals, cattle, buffalo and goat, had died from the same disease, we would expect also a large number of banteng and other wild animals to succumb, which has not happened. The disease under the domestic animals has so far not been identified and the reports on the extent and the time of the - outbreak are not very clear. Therefore as long as the cause of the deaths has not been identified, it is premature to ascribe the deaths of the rhinos and those of the domestic animals to the same disease. Also identification of the cause of death of the domestic animals will not automatically answer the question about the cause of death of the rhinos.

The peak of the rainy season is in January and February and the guards reported that this year the weather had been particularly bad, with a unusually heavy rainfall. It is wellknown that during

the rainy season man and his animals suffer more from diseases than in the drier periods. It can very well be imagined that also the condition of wild animals goes down in periods of bad weather, making them more susceptible for infections. Also the swampy conditions in large parts of the reserve during the rainy season might force the rhinos to concentrate in the drier parts, increasing the possibilities for the transmission of diseases.

Since the cause of the deaths will not become known before adequate samples from a fresh carcas are taken and analysed and since no more rhinos have been found dead for about one month now, the best strategy will be to keep the rhino population under a very close watch for the next few months. This will learn whether it was a short and localised epidemic or whether the disease has spread over the whole population and has caused a serious reduction in the number of rhinos.

In the beginning of February a traditional rhino census was made, the results of which was not significantly different from that of the previous census in 1981. It is recommended to repeat this census another two or three times, using the same method, about every two months, to record the population trend. Patrolling in the area where the dead rhinos have been found should be intensified. Any rhino that is found to be in this area should be under daily surveillance and it should be followed as much as possible.

It is recommended that the guards are equipped and trained so that they can at least take the most basic samples of a dead animal. In many cases it will not be possible to bring a vet to the location

of the find in time, and in those cases samples taken by the guards, provided that they are properly taken and preserved, can be of immense value.

There is no ground to erect an electric fence inside the park. As long as the cause and the extent of the epidemic are not known the effect of an electric fence, provided that it will be able to restrict the movements of the rhinos, will be at best doubtful. Erecting such a fence will need large investments of money and manpower and when it is not constructed and managed with the utmost care, animals can be maimed or killed when they try to break through the fence.

On the other hand an electric fence could be very helpful to keep domestic animals out of the reserve in places where they are accidentally or deliberately moved into the reserve area for grazing. It is recommended to use the materials that have already been transported to Tamanjaya to erect such a fence in the Legon Pakis and Cegog areas, as an experiment to learn its usefulness and limitations.

Map of survey trips



