breeding project, and several copies of the book 'Only One Earth' by Barbara Ward and René Dubos (1974).

Before starting the programme in the Province of North Sumatra, more experience was gained by performances in six villages in the area of Bohorok Rehabilitation Centre; at an exhibition at Banda Aceh during a national holiday; in a scout camp; and on a rubber estate.

At the beginning of June, the programme was started in the Province of North Sumatra using an improved version of the Medan Fair programme. The travel routes were worked out in co-operation with Dinas PPA, special consideration being given to the Langkat Reserve boundary. By the end of 1976, all residencies with the exception of the Nias residency had been visited. In the day time, performances were held at schools; in the evening audiences were villagers. The programme was introduced and supported by the local authorities and accepted everywhere with enthusiasm. In the North Tapanuli residency more than 1000 people attended the lectures in each district; in Labuan Batu residency, about 400; and on an average 250 persons attended each showing.

Members of the audience were given leaflets and questionnaires and the answers to the latter showed a very incomplete knowledge about wildlife laws and nature conservation. The interest was greatest among young people, but the number of older people at the performances gradually increased.

Recina Frey

Project 1188 Ujung Kulon Nature Reserve Scientific Mission

Project 1189 Ujung Kulon Nature Reserve
Protection and Management
Programme

WWF GRANT 1976 - \$5,580 (Project 1188) \$9,628 (Project 1189)

Project 1188: A study of the Silver gibbon population in the eastern part of the Ujung Kulon Nature Reserve was carried out by Mr Markus Kappeler of the University of Basle.

The Silver gibbon (Hylobates moloch), which occurs only in Java, is rapidly diminishing due to the destruction of its habitat, the primary forest. In Ujung Kulon, the species only

occurs in the most eastern area and in the adjacent forested area of Gunung Honje. So far the species has not been studied in the wild.

From August 1975 to October 1976, Mr Kappeler studied the ecology and behaviour of the Javan Silver gibbon, collecting data mainly on habitat utilization, distribution, population density and structure, and on vocalization.

These gibbons are monogamous and territorial. Family groups consist of a male and female with or without one to three offspring. Within the study area, territories measured about 20 hectares. The gibbons are mainly vegetarian, feeding on fruits, leaves and flowers of more than 120 species of trees, climbers and epiphytes.

During day-time, activity consists mainly in quietly shifting through the canopy, feeding and occasional shorter or longer resting phases. Usually in the morning, the female of each family group climbs a special high tree in the group territory to demonstrate its presence by calling. Normally it starts with an introductory series of calls, and then proceeds to a full series.

Such series of the full song can be uttered again and again for up to 40 minutes, and singing is especially intense if females of adjacent territories answer each other in alternation. On certain occasions, the male participates in singing. Besides this territorial singing a number of other types of vocalization were observed.

It seems that the small population unit in the eastern part of Ujung Kulon and the larger one in the forest of Gunung Honje are not strictly separated from each other, both forests being connected by a narrow forest strip. If the size of the territories north of Kalejetan is representative for the whole forest of Gunung Honje, the whole local population might number between 500 to 1000 individuals, being the largest remaining isolated population in Java.

Project 1189: Continuation of efforts to improve guarding and management activities in Ujung Kulon, and above all to provide the necessary conditions for a further increase of the last stock of the Javan rhinoceros.

There are no indications that poaching of a rhino has occurred during the past year. Since February 1976, two rhinos have left the peninsula through its bottle-neck at Karang Randjang, and have remained between this area and Cimokla. This has not occurred since 1969. Since that time only on a few occasions have short visits of a single rhino been seen, and this was the first time since 1969, that two animals have stayed for

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months in this area.

This might be the consequence of a certain population pressure in the peninsula itself. Likewise the numerous direct observations of rhinos made by guards and visitors in 1976 suggest an increase of the rhino population and seem to confirm the census results of 1975 as follows:

Results of Census (August 1975) (Compare with previous numbers published in Yearbook 1974-75, page 173)

Width of forefoot cm	Approx. age class years		individuals Maximum
		_	
16 - 20	0 - 1	1	1
21 - 24	1 - 3	8	9
25 - 28	adults (male and female)	29	36
29 - 30	adult males	6	7 *)
Not measurable			
but seen		1	1
		45	54

Mean: 49,5

*)In contrast to previous years no footprint with a forefoot width of 30 cm was found this year (1973: 2, 1974: 4). Whether this is due to the dry soil conditions, whether the largest males were accidentally not found or whether some of the older individuals have died, is an open question.

The protection of Ujung Kulon itself was satisfactory; the guards in general did their duty. On several occasions, and in different parts outside the main reserve, illegal wood-cutting occurred, and on Gunung Honje a few Banteng were poached. Apparently also Panaitan is not patrolled frequently enough to stop illegal exploitation (sea turtles, trees). It seems that some guards were involved in certain illegal activities, but in most cases they were discovered and punished.

The protection of Ujung Kulon seems to function well. The increased numbers of rhino observations, as well as the fact that two animals have trespassed to the area east of the reserve and remained there for some time, support the results obtained in the rhino census carried out in previous years, namely that the number of rhinos has increased during recent years.

The Financial support to the development and maintenance of equipment in Ujung Kulon made by the Indonesian Government has been higher in the past year than ever before. The support of WWF towards the guard system is, however, still urgently needed in the future to guarantee the continuity of good guarding activities.

Professor Dr R. Schenkel
Dr med. Lotte Schenkel-Hulliger

Project 1512 Indonesia - Promotion and co-ordination of conservation

WWF GRANT 1976 - \$1,581

Indonesia has an extremely rich and complex fauna and flora because it includes both the Indo-Malaysian region and the Australasian, and their overlap. Population pressure, shifting cultivation, poaching and timber exploitation are threatening this richness. Large areas of rain forest have been destroyed and several animals are on the verge of extinction. A comprehensive conservation programme involving 17 projects with an allocation of one million dollars was developed during 1976, and will be launched as a joint operation of the Indonesian Directorate of Nature Conservation and Wildlife Management and the World Wildlife Fund in 1977.