Rhinoceros, Asian

Project 1960
Indonesia, Ujung Kulon, Javan Rhinoceros
WWF Funding 1982/83 — $16,556
(Total since 1980 — $26,559)

Project Initiated 1980

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Objective To monitor population dynamics of the Javan rhinoceros, with particular emphasis on immature animals, and to study movements, diet and habitat utilisation, so as to develop a practical conservation and protection programme.

Participating Organization Directorate General for Forest Protection and Nature Conservation (PHPA).

Ujung Kulon peninsula, Java, is the last refuge for the world's small remaining population of Javan Rhinoceros (*Rhinoceros sondaicus*). The sudden and unexplained deaths of five animals between December 1981 and February 1982 prompted a call for the establishment of a second herd. But this can proceed only when it has been determined that the Ujung Kulon herd is healthy and approaching the carrying capacity of the habitat.

The area of Ujung Kulon National Park cannot be extended, and adequate protection cannot be guaranteed to the animals outside this region. The formation of a herd at Wai Kambas in Sumatra and its development as a national park would therefore be advantageous. The area would protect elephant, tapir, tiger, several primate species, and a rich and diverse bird fauna, and the introduction of the Javan rhino would add to the attraction and value of Wai Kambas as a National Park; moreover, as a National Park, Wai Kambas would receive additional government and public attention, as well as a guard system with radio communication providing optimal protection to the park and Javan rhinos.

The ability of Wai Kambas to support a Javan rhino population must first be assured. A feasibility study is needed to examine the ecological suitability of the habitat (food, water, salt, vegetation cover and accessible clay layers for wallowing); the likelihood of providing optimal protection to each animal against poaching; and to evaluate the probability of creating a positive attitude among the surrounding human population towards the protected area and its animals. But first, more information on the population dynamics and status, and aspects of behaviour of the rhino in Ujung Kulon is required.

Field work in Ujung Kulon began in August 1982 and continued through September 1983. Information on the population was obtained by studying the composition of the herd and identifying individuals through plaster-casts of their footprints. Aspects of their behaviour, diet and use of habitat were examined by tracking, recording plants browsed, identifying feeding, wallowing, or bathing areas, and the analysis of scats.

The population is estimated to number 61 individuals. This is an increase of three over the previous year's estimate and includes two mother and calf pairs

identified in September 1982. The rhinos are distributed throughout Ujung Kulon but the highest concentration occurs in the vicinity of Gunung Payung. Some feeding activity occurred in the vicinity of swampy areas during the dry season. Resting, wallowing or bathing areas were usually associated with moist forest, although occasionally these areas were located in dense vegetation adjacent to feeding areas.

The rhinoceros obtained their food by browsing or pushing over larger vegetation to bring the preferred food within reach. An analysis of 821 samples reveals that the animals prefer young leaves but occasionally feed on mature leaves, plant piths, stems, bark and fruit. The diet is diverse and to date 61 families, 127 genera and 166 species of plants have been identified.

Rare and elusive, the Javan rhino allows the photographer only a fleeting glimpse in its last refuge on the Ujung Kulon peninsula, Java, where the population is estimated at 61 animals. *Photo: WWF/J. van Strien*