



# JAVAN RHINO MANAGEMENT THROUGH RHINO MONITORING UNIT IN UJUNG KULON NATIONAL PARK

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Rhinos, one of the most recognized and threatened species on the planet are one of world's most important biological treasures. The two species of rhino found in Indonesia and also in Borneo, the Javan rhino (Rhinoceros sondaicus, Desmarest 1822) and the Sumateran Rhino (Dicerorhinus Sumatrensis), The Javan rhinoceros (Rhinoceros sondaicus Desmarest, 1822) is claimed to be one of the rarest mammals on earth with a population of only 60 individual rhinos in UKNP. None survive outside, even in zoos. It's population can be identified successfully using camera trap data. Monitoring Javan rhino population is one of the priority activities mandated by the Minister of Forestry Regulation No. P.43 / Menhut-II / 2007 on Strategy and Action Plan for Indonesian Rhino Conservation. Since 1967, the rhino population has been monitored using the footprint count method (Schenckel and Schenckel, 1969). Since 1994 – 2010 this methodology gave an estimated population size of 50-60 individuals. This method only produces the estimation of the population and the age. It was never showed the exact number and the sex ratio. To improve the accuracy of the data, in 2011, the UKNP authority tried a new method to monitor the population using video trap camera done by a trained field team "Rhino Monitoring Unit (RMU)". This led to the most recent estimation of 58 individuals in 2013. From this data, it is possible to say the population is stable. The goal of RMU's activity is to provide better management of Javan rhino conservation at Ujung Kulon National Park.

#### **Objectives**

- To get on accurate data of population number, sex ratio and age structure of Javan rhino.
- To enhance the data analysis of Javan rhino population monitoring.
- To provide management input for the Javan rhino conservation.

### **Expected Outcomes and Benefits**

- Provide basic data about Javan rhino population such as number, sex ratio and age structure as the main part for increasing the javan rhino population.
- Gain knowledge of the behaviour of the rhino and the distribution pattern of the population.
- Document the population's reproductive activities.
- Understand how the rhino interacts with the ecosystem in terms of food plants and other fauna.

# MANAGING SOUTHERN WHITE RHINOS IN A DYNAMIC MIXED SPECIES EXHIBIT WITH EXTENDED HOURS

Andrea Swinehart, Disney's Animal Kingdom, andrea.swinehart@disney.com

Currently at Disney's Animal Kingdom (DAK), 2.5 Southern white rhinos ranging in age from 2 to 25 are exhibited with 0.2 addax, 0.3 common zebra, 0.5 ostrich, and 2.0 bontebok on the 11 acre "East Savanna". Overnight, they are housed separately in a 6,341 sq ft barn. Animals shifting to a barn in response to a cue can be a challenge in such a dynamic environment. Attraction vehicles are cycling through at a continuous rate all day and can briefly block the animals' paths. Hay drops have to be strategically timed so that both rhinos and hoof stock get an appropriate amount of food without being distracted during cue attempts. New animals were introduced into the exhibit space and affected the interspecies interactions. Environmental factors such as the daily Florida summer storms and the

time of day provide a consistent challenge as well. For the past two years DAK has been undergoing growth and change. The largest project, the Safari Night Experience, has involved managing animals so that extensive construction could take place in the exhibit spaces overnight, adding additional keeper shifts to cover the extended hours, and most importantly, reevaluating current animal husbandry strategies to better suit the new hours. The shifting cue response has been an integral aspect of managing construction, guest satisfaction, and animal welfare. In previous DAK protocols, when the rhinos did not respond to shifting cues, they stayed out on the exhibit overnight and the exhibit was locked down, meaning that no work could occur. To help streamline the construction process and improve rhino cue response, a small group of keepers acted as advocates for the shifting behavior. A new mobile cue was chosen so that the rhinos could be cued from the barn or a truck. The new cue was paired with their grain in the barn before being moved out onto the exhibit, where it was paired with their hay drops from a truck. Finally, the cue was brought back to the barn where communication between the shifters and the truck keeper has been key. The ability to cue from the truck has been a helpful management tool to visually remind the rhinos to shift. On the rare occasion that rhinos choose not to respond and high priority work must take place on the exhibit space, a second and sometimes third cue attempt will take place, often from the truck. In conclusion, this presentation will highlight the changes and challenges involved with implementing a new guest experience. It will also examine how the extended hours and the new cueing strategy allowed for a new housing strategy to be implemented so that two separately managed crashes of rhinos could be alternated between being housed on exhibit and in the barn each day.

#### ARE YOU MY MOTHER?

Justin Smith, Fossil Rim Wildlife Center, justins@fossilrim.org

This presentation will be about the birth and hand rearing of 1.0 southern white rhino that was rejected by its mother. Specifically, my talk will focus on the reintegration of the rhino calf into Fossil Rim Wildlife Center's crash.

### INTRODUCING MALE RHINOS FOR COMPANIONSHIP

Mandy Siegel, The Maryland Zoo in Baltimore, mandy.siegel@marylandzoo.org

Historically, the Maryland Zoo in Baltimore (MZiB) housed a pair of southern white rhinos. Our female, Daisy arrived in 1992 at the age of 24, followed by our male, Stubby in 1996 at the age of 4. Though unfortunately never successfully producing offspring, the two were very closely bonded. In April of 2016 Daisy was euthanized at the age of 48 due to worsening age-related mobility issues. The SSP was contacted with the hopes of acquiring a companion for Stubby. As Stubby adjusted to being the only rhino at MZiB, his daily activity budget changed, with a dramatic increase in stereotypic behavior. Knowing Stubby had always been sensitive to external stimuli, keepers monitored a number of factors in his environment; however, none were found to be compounding his stereotypic behavior. Subsequently, when the SSP allocated MZiB a four-year-old male, Jaharo, the decision was made to introduce him to Stubby for companionship. As of March 2017, construction of a "howdy" door has been completed for introducing the two males – all doors between pens and yards were previously completely solid. We are currently in the process of acclimating each male to the "howdy" door set up. The two males have been alternating time spent on exhibit and defecating in the same midden since the beginning of February. I expect to have detailed information about the full introduction process and how it has impacted the behavior of both individuals in plenty of time for the workshop in August.