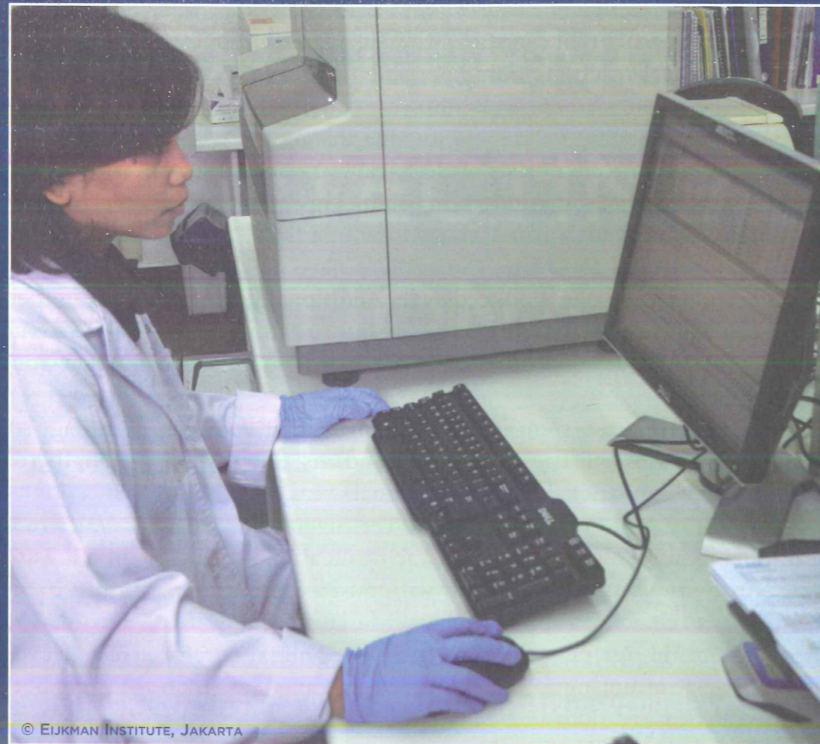


# ONE VERY SPECIAL RHINO



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If our last-ditch effort to save the Sumatran rhino from extinction succeeds, it will become the conservation success story of the 21st Century. It will also reinforce the role that captive breeding can play in a global conservation strategy. The birth of a single animal certainly does not constitute species recovery but, in the case of Andatu - the first rhino calf born in captivity in Indonesia - it verifies that good science and commitment can yield desired results. Andatu's birth also bodes well for the future of this vanishing species.

In his book, *The Future of Life*, biologist E. O. Wilson refers to his first gaze upon a living Sumatran rhino at the Cincinnati Zoo as having "at last met my real-life unicorn". It was 1994 and he was referring to Emi, a non-reproductive female at that time. The book went to press in 2001, the same year, coincidentally, in which Emi delivered her first calf - Andalas - the first Sumatran rhino born in captivity in more than a century. Andalas is an ancient name for the island of Sumatra. Emi went on to produce two more calves: a female, Suci (Indonesian for sacred) in 2004 and a second male, Harapan (Indonesian for hope) in 2007. Unfortunately, Emi died in 2009, leaving her three offspring as legacy to the species' future. Andalas received the first opportunity to contribute.

From Cincinnati, Andalas was moved to the Los Angeles Zoo in 2004 and subsequently transported to his Indonesian homeland in 2007. His destination was the Sumatran Rhino Sanctuary (SRS), established in the late 1990s by the International Rhino Foundation (IRF) within the boundaries of Way Kambas National Park and managed by the Rhino Foundation of Indonesia (Yayasan Badak Indonesia or YABI). Awaiting his arrival were three potential mates - Bina, Ratu and Rosa - all from different regions of Sumatra and none of them proven breeders. Torgamba, the aged male in residence, showed minimal reproductive potential, while Andalas was just coming into his prime.

Despite Andalas' apparent readiness, his introduction to the three females was undertaken with caution, as captive history has shown this process to be potentially volatile. Fortunately, the 250-acre sanctuary provides spacious forest enclosures for each animal, as well as the capacity to delicately manage their interactions. It took Andalas a few years, but he eventually won Ratu's affection and mated with her in January 2010. That attempt, regrettably, ended in miscarriage only a few months later. A similar result followed a July breeding attempt the same year. Finally, after a third mating in March 2011, Ratu's veterinarians made the decision to put her on the same hormone replacement therapy that had enabled Andalas' mother, Emi, to carry him to term. The strategy worked. Ratu completed the 16-month gestation period without incident and gave birth to Andatu shortly after midnight on 23 June of this year.

"Andatu" is a combination of his father's and his mother's names, but it is also short for an Indonesian term that means a "Gift from God". His birth occurred only weeks after Indonesia's president had declared 2012 as the International Year of the Rhino. Videos of the midnight delivery and his subsequent antics have received countless hits on YouTube. Andatu even has his own Facebook page, to which friend requests continually arrive. He could easily be voted the world's most famous rhino this year.

In addition to increasing the world captive population of Sumatran rhinos by ten percent, Andatu's birth also helps draw attention to the species' sobering plight. According to the IUCN Red List of Threatened Species, the Sumatran rhino is Critically Endangered; between 150 and 200 individuals are believed to survive in Indonesia and Sabah, Malaysia. The species once ranged all the way to the foothills of the Himalayas, but has been extirpated from at least six Southeast Asian countries, barring the rediscovery of any relict populations. Its final strongholds are three Sumatran national parks: Bukit Barisan Selatan, Gunung Leuser and Way Kambas. The fragmented Malaysian population probably numbers no more than two dozen scattered individuals and is now considered non-viable if managed as a distinct subspecies in isolation from the Sumatran population. The task of coordinating a conservation strategy for this species that maximizes the contribution of both captive and wild populations falls to the Global Management and Propagation Board (GMPB), comprised of rhino experts from government agencies, NGOs and zoological institutions representing Indonesia, Malaysia, Australia and the United States.

The path forward for the Sumatran rhino is relatively straightforward. Efforts to protect remaining wild populations must continue. IRF-supported Rhino Protection Units at work in Bukit Barisan Selatan and Way Kambas have brought a halt to rhino poaching in those two national parks, and collaborative efforts are now underway with authorities that operate similar programs in Gunung Leuser. The captive population, which currently numbers 11, requires new founder stock. Both Rosa and Ratu were rescued after wandering outside of protected areas, but waiting for similar circumstances to arise is not a viable strategy. Planned captures for breeding purposes are essential, especially in Sabah, where a new facility is currently under construction. In addition, the GMPB's recommendation that reproductive tissues be shared across international boundaries is a major step forward, one that will allow biologists to refine artificial insemination techniques for this species. Research currently underway at Indonesia's Eijkman Institute for Molecular Biology will soon provide a clearer picture of the genetic diversity and relationships within remaining populations, as well as help inform management decisions.

Ultimately, the successful breeding of Sumatran rhinos in captivity, coordinated with the management of wild populations, should result in the translocation of animals between protected areas, the reintroduction of captive-born Sumatran rhinos to native habitats, and the re-establishment of extirpated populations within the species' former range.

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