http://news.cornell.edu/stories/2007/02/veterinarians-help-rare-sumatran-rhino-relocate-indonesia

Andalas, rare Sumatran rhino, helped by Cornell veterinarians on historic relocation to Indonesia By Krishna Ramanujan | February 16, 2007

Andalas update

After leaving the Los Angeles Zoo on Feb. 18, Andalas arrived safely at his destination, a rhino sanctuary within an Indonesian national park. While his handlers did not expect to tranquilize him on the trip, they did end up sedating him to keep him from rubbing his face against the bars. By all accounts, Andalas is adapting well to his new home. The photos below show Andalas following his arrival in Indonesia.

Born in captivity, Andalas, a Sumatran rhinoceros, is so comfortable in his metal crate that his handlers do not plan to tranquilize the rare animal when they truck and fly him from the Los Angeles Zoo to the Sumatran Rhino Sanctuary in Indonesia on Feb. 18.

This will be the first time a captive-born Sumatran rhino (one of the rarest rhinos in the world with only about 300 animals remaining in the wild) has ever been moved to its species homeland, in this case Indonesia.

Cornell veterinarians have been helping manage the health-care challenges of this international animal relocation. A key part of the preparations was the recent vaccination of Andalas against diseases for which he has no immunity.

Robin Radcliffe, adjunct assistant professor of wildlife and conservation medicine at Cornell's College of Veterinary Medicine, is coordinating the medical program for the move. He will be accompanied by another veterinarian and a keeper from the Los Angeles Zoo, and will fly with Andalas in the cargo hold of a KLM transport plane. Andalas has been well conditioned to his transport crate and is expected to travel quietly on the long trip to Indonesia.

Radcliffe leads the new Rhino Conservation Medicine Program, which is based at Cornell and affiliated with the International Rhino Foundation (IRF) and the Fossil Rim Wildlife Center (FRWC). Radcliffe is the former director of animal health at the FRWC.

Once set loose in the Sumatran Rhino Sanctuary, a 100-hectare protected rhino haven within the rain forests of the Way Kambas National Park in Indonesia, Andalas perhaps will face the biggest challenge to his successful relocation: a variety of tick-borne blood parasites for which he has no primary immune defenses.

While native Sumatran rhinos become infected with various blood parasites, they do not develop disease because infection occurs at a young age. But Andalas, born in 2001 at the Cincinnati Zoo, has lived his entire life in the United States with no exposure to these parasites.

Knowing that such parasites have foiled reintroductions of black rhinos, bongo antelopes and livestock in tropical regions, Radcliffe collaborated with Cornell immunologist Julia Flaminio, assistant professor of equine medicine. With experience working with these same blood parasites in her native country, Brazil,

Flaminio contacted a colleague who has developed a safe vaccine with proven efficacy in domestic livestock. These parasitic diseases (Anaplasmosis and Babesiosis) are endemic to both Brazil and Indonesia.

Flaminio imported the vaccine to her Cornell laboratory and carefully prepared each dose for Andalas. Marking the first attempt to immunize a rhino against tick-borne diseases, Andalas was vaccinated over a six-week period starting in December 2006 at the Los Angeles Zoo.

Once in the Indonesian sanctuary, each morning a team of keepers will go into the forest to monitor and care for Andalas. The rhino will be hand-fed, and the mud that covers him from his daily wallows will be removed with water to allow careful examination for ticks or other hazards. With three female Sumatran rhinos and an aging male also in the sanctuary, the program's staff view Andalas as a key component of the future breeding program.

"The end goal is to help supplement the endangered wild populations, with Andalas serving as a model for similar conservation programs," said Radcliffe. The Way Kambas National Park currently is home to approximately 20 free-roaming Sumatran rhinos. The hope is that Andalas or his offspring will eventually join them in the wild.