## **BIRTHS & HATCHINGS**

foot marked with a non-toxic paint to allow keepers to identify them. Once old enough, the chicks will have wing bands just like the other adult penguins on display.

Omaha's Henry Doorly Zoo and Aquarium's rockhoppers are southern rockhopper penguins. Currently, 317 rockhopper penguins reside at 17 Association of Zoos and Aquariums (AZA) institutions in North America. In the wild, these species reside in the South Atlantic, Indian and Pacific oceans. They are currently listed as vulnerable, with a declining population, on the International Union for Conservation of Nature's (IUCN) Red List due to fisheries, loss of habitat and oil spills.

## BABY GOELDI'S MONKEY BORN AT THE LEE RICHARDSON ZOO

The Goeldi's monkey family at the Lee Richardson Zoo in Garden City, Kan., recently welcomed a new addition with the birth of a third baby to parents Domingo and Sucre. Born on 31 May, the tiny infant is doing well.

These petite black primates weigh just one-to-two ounces at birth, and grow to 14-to-18 ounces as adults. The baby is the third for its parents, and a birth planned by the Callimico Species Survival Plan® (SSP). The Goeldi's family, including parents and two older sisters born last year, are all on display in the rainforest exhibit inside the Marie Osterbuhr Aviary building.

Goeldi's monkeys live in the tropical forests of South America's Western Amazon basin. Listed as Vulnerable in the wild, the species is threatened by deforestation and poaching.

## ENDANGERED INDIAN RHINOCEROS CALF PRODUCED BY ARTIFICIAL INSEMINATION WITH CRYOPRESERVED SEMEN

The Cincinnati Zoo & Botanical Garden's Center for Conservation and Research of Endangered Wildlife (CREW) in Cincinnati, Ohio, and the Montgomery Zoo in Montgomery, Ala., announced the birth of a healthy male Indian rhino calf

produced by artificial insemination (AI). This birth represents the first surviving calf of any rhino species produced by AI in a U.S. zoo and is the culmination of years of research, teamwork and perseverance.

In 1999, CREW scientists teamed up with the animal staff at the Wilds in Cumberland, Ohio, in a collaborative effort to develop semen collection and cryopreservation techniques for this rhino species. After several years, the appropriate methodologies were established, and CREW reached out to other zoos with genetically valuable male Indian rhinos. Many of those zoos, including the Bronx Zoo in New York, N.Y., Montgomery Zoo, Lowry Park Zoo in Tampa Bay,

Fla., and White Oak Conservation Center in Yulee, Fla., also contributed to the growing collection of frozen Indian rhino sperm stored in CREW's CryoBioBank®. In a parallel effort at the Cincinnati Zoo, CREW scientists, veterinary staff and rhino keepers initiated a project aimed at characterizing the reproductive physiology of the female Indian rhino and developing AI techniques. These efforts were rewarded with two term pregnancies at the Cincinnati Zoo in 2007 and 2010, but sadly, neither calf survived. CREW's Reproductive Physiologist, Dr. Monica Stoops, who leads the Indian rhino effort adapted the procedures for implementation at off-site facilities and expanded the program to include female Indian rhinos at the Wilds in Cuberland, Ohio, and at the Montgomery Zoo.

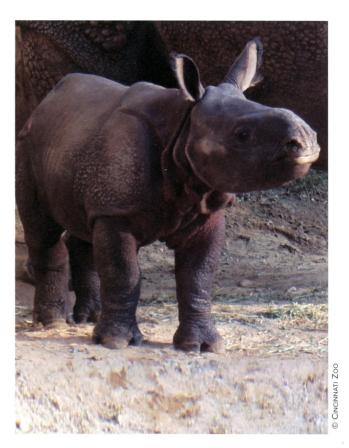
In 2011, Dr. Stoops started working in partnership with Dr. Jack Kottwitz from the Montgomery Zoo to artificially inseminate the Zoo's 12-year-old female rhino who was a proven breeder on an extended breeding loan from the San Diego Wild Animal Park in San Diego, Calif. The Zoo's initial attempts to breed the female naturally with the resident male resulted in significant aggressive interactions between the two, suggesting they were behaviorally incompatible. Although the female failed to conceive following the first two AI attempts, a pregnancy was confirmed following the third AI performed with the female under standing sedation in February 2012. The frozen-thawed semen used for the AI had been collected at the Wilds in 2004, and stored at -320°F in CREW's CryoBioBank in Cincinnati for eight years before it was brought to Alabama, thawed, and used in the AI procedure. The Montgomery Zoo staff carefully monitored the female's pregnancy over the 15-to-16 month gestation period and on 5 June 2013 she successfully gave birth to a healthy calf.

"Everyone at the Cincinnati Zoo, especially the scientists at CREW, are incredibly excited to watch this calf grow up," said Dr. Stoops. "The scientific significance of the birth and the successful upbringing by Jeta are a lifetime of work in the making.



We were honored to work closely with the Montgomery Zoo staff to do the AI and we are proud to help introduce this baby to the world."

This is a significant birth and scientific achievement for CREW, the Montgomery Zoo and the Indian rhino Species Survival Plan® (SSP) since the Indian rhino is an endangered species. The calf demonstrates that sperm banks and AI are valuable tools that can now be integrated into the management strategy for the captive Indian rhino population. With only 60 Indian rhinos in captivity in North America and approximately 2,500 remaining in the wild, successful breeding between rhino pairs is important to maintain the genetic diversity necessary to keep a population healthy and selfsustaining. Unfortunately, natural breeding attempts in captive Indian rhinos frequently result in severe aggression between the male and female. Thus, behavioral incompatibility can hinder the genetic management of the population. AI now offers a method for overcoming this hurdle and infusing genes from non- or under-represented rhinos into the population. CREW's Indian rhino sperm banking and AI program has been supported over the years by several generous private donors, grants from the Morris Animal Foundation and International Rhino Foundation, and most recently, by a National Leadership Grant from the Institute of Museum and Library Services.



## THE SAINT LOUIS ZOO, SEA WORLD ORLANDO AND THE TAWNY FROGMOUTH SSP COLLABORATE WITH AUSTRALIAN PARTNERS TO IMPORT **NEW FOUNDERS**

The Tawny frogmouth (Podargus strigoides) was until recently managed as a "Yellow" AZA Species Survival Plan® (SPP) with a population size of 143 individuals distributed among 55 institutions. Since the 1970s, the Tawny frogmouth population, like many other avian populations, exhibited periods of growth and decline. Importations from the United Kingdom in 2008 and Australia in 2009 as well as increased focus on breeding by individual institutions (Sea World, Orlando and San Antonio Zoo) helped reverse the trend of population decline, but a large number of aged and post-reproductive birds in the population caused continued concern for the long-term viability of the population.

The SSP identified the importation of new founder stock as an objective in the 2012 Population Analysis & Breeding and Transfer Plan. On



July 5, the Saint Louis Zoo in Saint Louis, Mo., with the support of Sea World Orlando imported, on behalf of the SSP, 12 tawny frogmouths from the Darling Downs and Adelaide Zoos in Australia. All of the birds were captive born or brought to the Australian zoos as orphaned chicks that could not be released back into the wild. On 2 November, just four months after the importation, the first chick from these new founders hatched at the Saint Louis Zoo. This inter-regional collaborative effort has resulted in the status change of the North American population from a "Yellow" to a "Green" program.