https://news.mongabay.com/2017/03/saving-orphaned-baby-rhinos-in-india/

Saving orphaned baby rhinos in India

17 March 2017 / Shreya Dasgupta

The Center for Wildlife Rehabilitation and Conservation in Assam State gives orphaned rhinos a second chance at life in the wild.

- The Center for Wildlife Rehabilitation and Conservation, near Kaziranga National Park in Assam State, is currently home to nine greater one-horned rhino calves, including eight orphaned in monsoon floods last year.
- Carers at the center hand raise these young rhinos with the aim of reintroducing them to the wild when they are old enough to fend for themselves.
- Since 2002, the center has raised and released 14 rhino calves, along with young from other species including elephants and wild buffalo.
- Raising these vulnerable animals requires years of painstaking effort.

BORJURI, India — A baby rhino is easy to dismiss as cute.

With a barely visible stub of a horn and thick, folded skin that resembles armor, a young rhino can seem small and delightful. But even a few-weeks-old rhino calf can be aggressive. A seemingly harmless calf, on feeling threatened, can come charging at you and cause injury if you're not careful.

With this in mind, I keep my distance from the babies as I walk to the four-acre rhino enclosure at the Center for Wildlife Rehabilitation and Conservation (CWRC) near Kaziranga National Park. The park, located in the northeastern Indian state of Assam, is one of the last remaining strongholds of the greater one-horned rhinoceros (*Rhinoceros unicornis*).

I am close enough to watch two rhino calves graze some fifteen feet away, but far enough for them to ignore me as they blissfully chomp on grass.

These babies are orphans, being hand-raised for a second chance in the wild.

An infant rhino struggling in the floodwater of Kaziranga was rescued by IFAW-WTI wildife rescuers from Diphalu Pathar village with the help of Kaziranga forest staff, local villagers and NGO members of KNEECA on July 27, 2016. Photo courtesy of Subhamoy Bhattacharjee/IFAW-WTI.

Last year, raging monsoon floods submerged nearly 80 percent of Kaziranga National Park. Unable to access drier highlands in time, more than 450 animals — including 26 rhinos, 363 hog deer, 14 swamp deer and 21 wild pigs — drowned in the floodwaters unleashed by the River Brahmaputra, which marks the park's northern boundary.

Many animals were also killed by speeding vehicles while trying to cross a national highway to escape the flood. This highway, NH 37, forms the southern boundary of the park, separating it from the wooded highlands of the Karbi Anglong hills.

Babies were particularly affected. The flood — Kaziranga's worst since 1998 — created a pool of orphans stranded in the flood. Either their mothers had drowned, or they had been unable to keep pace with their mothers as they attempted to escape.

Eight rhino babies survived.

In January, I traveled to CWRC where these rhino calves now live. On the way to the center, I passed several wild rhinos, mostly mothers with calves, grazing in Kaziranga's grasslands amid large herds of hog deer and countless troops of rhesus macaques.

Despite warning signs on the highway asking people to be mindful of their speed, my driver, a young man named Babul Hussain, sped down the road, swaying his head to loud Assamese songs blaring out of the car's sound system. Next to Panbari Nature Reserve, one of the last homes of the endangered western Hoolock gibbons, Hussain turned right and drove through a tea plantation, stopping in front of a gate that marked the entrance to CWRC.

"I live in Panbari, but I had no idea this was right next door," he said with a grin.



CWRC vets, volunteers and animal keepers during routine treatment of rhino calves at the large animal nursery of the AFD & IFAW-WTI's jointly-run wildlife care facility in 2016. Photo courtesy of Subhamoy Bhattacharjee/IFAW-WTI.

Spread over a 17-acre plot of land, the rehabilitation center was founded in 2002 as a joint-venture between the Assam Forest Department, the International Fund for Animal Welfare (IFAW), and the Wildlife Trust of India.

Its main purpose at the time of its inception was to rescue and rehabilitate flood-displaced wild animals from Kaziranga, said Rathin Barman, deputy director of WTI and the head of the center. Lying in the floodplain of the massive River Brahmaputra, the park is regularly inundated during the monsoons, often giving its animals little opportunity to escape.

Now, CWRC caters to most wildlife emergencies around the park, including animals displaced due to human-wildlife conflict, or babies orphaned due to poaching of their mothers. The center's specialization, though, is hand-raising orphaned large mammals like rhinos, elephants and wild buffalo.

Currently, CWRC is home to nine rhino calves, including eight rescued from flood waters in 2016, and an older calf rescued in 2015. The center also houses 11 elephants, four hoolock gibbons that howl loudly and swing from branches as I walk past their enclosure, and four leopards, three of which are sisters that were rescued as cubs from a tea plantation after their mother was killed by villagers and hung from a tree.

Barman and his staff of two veterinarians and 11 animal keepers not only rescue and treat these displaced animals, but also strive to return them to the wild. For the rhino babies, this involves years of painstaking effort.

"The rhino calves we rescue are usually very, very young," Barman said. "They get separated from their mothers during floods and get stranded here and there. If we don't rescue them, the babies will either be killed by predators or will die due to other causes."



Rhinos being hand raised in the CWRC paddock munch on fodder offered in winter. Photo courtesy of Subhamoy Bhattacharjee/IFAW-WTI.

Rescuing stranded rhinos

Usually, it is the local communities living around Kaziranga that inform the forest department staff or WTI team about animals that may have strayed.

Kaziranga is home to nearly 2,500 greater one-horned rhinoceros. With a navigable river and highway for its boundaries, it is unsurprising that some of these animals frequently wander out of the park in search of food, water or space. In such cases, the local communities become the eyes and ears of CWRC's rescue and rehabilitation work, Barman said.

In the beginning, people wanted to kill wild animals that strayed into their villages, he added, but with persistent awareness campaigns they have become a crucial part of the rescue process. Uttam Saikia, a local journalist and resident, and currently Kaziranga's Honorary Wildlife Warden, has helped create a network of concerned villagers living on the fringes of the park who

keep track of rhinos that get stranded within villages or tea estates. "We monitor their movements and inform the Forest Department to send some forest guards, and with their help, we try to send the rhinos back into the park," he said.

The situation gets worse during the monsoons. Hundreds of rhinos scramble to escape, some ending up outside the park, near or within dense human habitation.

This is a big problem, Rohini Saikia, the Divisional Forest Officer (DFO) of Kaziranga said. "These rhinos can then become a target for poachers."

Poaching remains one of the biggest threats to the rhinos in Kaziranga. In 2016, poachers killed 18 rhinos in the park, hacking off their horns for Chinese markets.

Because of this threat, the first preference is to ensure that the wandering rhinos return to the national park, Saikia said. "During flood season, because many rhinos stray out, we have to deploy our staff towards every rhino. If we fall short, we request staff from neighboring divisions to help us."



An infant rhino calf struggling in the flood water was rescued from Sildubi area of Bagori forest range of Kaziranga by IFAW-WTI wildlife rescuers and Kaziranga forest staff with the help of local villagers and on July 27, 2016. Photo courtesy of Subhamoy Bhattacharjee/IFAW-WTI.

The Assam Forest Department does not have a specialized rescue team, he added, but they work with the villagers, local police and the WTI team at CWRC to rescue the animals and send them back.

While healthy adult rhinos can be coaxed back into the park, injured adults, and orphaned babies are usually rescued and sent to the rehabilitation center. During the floods, this can entail traveling through water-logged villages by boat and pulling stranded babies on board. "In the middle of the flood, we cannot tranquilize any animal, so we have to physically restrain the baby rhinos by putting some nets or noose around them," Barman said. "Once they are physically restrained, we can immediately take them away to our center. If the rhino calf is older, then we have to judge the situation. A six-month-old rhino can easily kill a human. It can break your ribs. So, we wait for the right moment, then rescue them."

Once the babies arrive at the rehabilitation center, the WTI team hand-raises them until they are about three to four years old, big enough to survive in the wild on their own.

Milk time for the Rhinos at the CWRC paddock in winter. Photo courtesy of Subhamoy Bhattacharjee/IFAW-WTI.

Hand-raising baby rhinos

Baby rhinos rescued from floods are often just a few weeks old — stressed and with weakened immunity.

When such young babies are first brought to the rescue center, they are kept in a quiet, undisturbed, well-ventilated nursery room, away from people. Only the animal keeper, and occasionally the veterinarian, is permitted to interact with the calves.

This limited contact between the rhinos and people is to avoid excessive taming of the animals, Barman said. "These rhinos eventually go to the wild, so we keep them away from people." The nine rhino orphans currently at the center were also kept within the nursery for the first few weeks. Later, they were released into a larger enclosure — the one I'm standing across — to begin their rehabilitation process.

In the wild, rhino calves stay with their mothers until they are about three to four years old, after which they move away to carve out their own territories in the undiscovered corners of the park. In captivity, however, finding a companion can be a challenge.

Typically, animal keepers serve as foster mothers by continually staying with the calves. Fortunately, the nine rhinos at the center keep each other company, chief veterinarian Panjit Basumatary, said.

While the babies in front of me pick up their snouts to sniff at the cool winter air, I watch two animal keepers walk around with a long pipe, filling up shallow trenches with water.



Rhinos playing in water body in the CWRC paddocks on Monday,9th January 2017. Photo:Subhamoy Bhattacharjee/IFAW-WTI

These man-made water bodies within the enclosure are vital for the rhino calves, Basumatary said. The rhinos wallow in the muddy water to bring down their body temperatures and to keep pests away.

The water also serves an unexpected purpose. It helps the rhino babies defecate by stimulating their lower abdomen and anogenital area. Turns out, dealing with constipation is a major challenge when hand-raising a young rhino orphan in captivity.

"When you rescue rhino babies from the wild, they may not defecate for 10 to 15 days," Basumatary said. "So we have to make small water bodies where the baby can spend some time in the water. The water helps stimulate the calf, and once that happens, it might defecate within seven to 10 days. That is when we can relax."

Another major challenge in saving orphaned rhinos is to find an appropriate substitute for their mother's milk, rhinos' sole food source during the first few months of their lives. Unfortunately, a substitute is not easy to find.

The milk of the Indian rhinoceros is lower in fat and protein, but higher in lactose than the milk of domestic cows, buffalo, goats or sheep. In fact, feeding cow or buffalo milk to rhinos can cause diarrhea in these animals, often resulting in death. This is why CWRC discourages people living around Kaziranga from trying to hand-raise animal babies on their own.

"Sometimes, people become over-enthusiastic about saving these animals," Barman said. "They have good intentions, but they end up feeding them cow's milk or buffalo milk because these are cheaper and more readily available. But these milks are not suitable for rhinos. You have to be very, very specific with the milk formula you give. So during our awareness campaigns we tell them: unless and until it is absolutely necessary, don't rescue a wild animal."



Rescued male rhino calf from the fringe village of central range of Kaziranga National Park under care at CWRC large animal nursery in July 2016. Photo courtesy of Subhamoy Bhattacharjee/IFAW-WTI.

Instead, the CWRC team feeds its rhinos human baby formula —Nestle's Lactogen 2 — diluted in lukewarm water, and fed using a two-liter bottle with a long rubber nipple. While this does not exactly mimic a rhino mother's milk, this is the only milk formula that the Indian rhinos seem to tolerate and is relatively easy to access, Barman said.

In the wild, rhino calves feed on their mother's milk until they are about four years old. But at the center, the orphans are weaned off milk sooner.

When they are about six months old, the calves are introduced to fresh greens, along with milk, and mineral and vitamin supplements. Then after 18 months, their diet is almost completely grass. This early weaning is necessary because human baby milk powder is expensive, Barman said.

A month-old rhino baby drinks about six packets of Lactogen 2 in a day, each packet priced at about 281 rupees (~\$4.2).

"This amounts to about 50,000 rupees a month per rhino calf," Barman added. "If you add another 10,000 rupees per month for things like medicines and animal keeping, that brings the cost to nearly 60,000 rupees (~\$899) per month for a single rhino calf. So it's a costly business for us."

As the center's primary donor, IFAW bears most of this cost. But after last year's devastating floods brought in eight orphaned rhino calves, WTI launched an aggressive PR campaign on social media bringing in a flurry of donations from individuals. Some people raised money for the rhinos, while others donated baby formula. Students at one school in a remote Assam village even gave up their mid-day meal and used the money to buy milk packets for the calves. Some individuals, including doctors, popular singers and actors, also offered to adopt the calves and pay for their well-being.

The support has been good, Barman said, but it is still not enough.

Baghmari, a rhino hand raised at the CWRC, was released at Bagori range of Kaziranga National Park on March 17, 2015. Photo courtesy of Anjan Sangma/IFAW-WTI.

Back to the wild

understand"

Despite the challenges, all nine rhinos at the center are on their way to being rehabilitated in the wild.

CWRC rescued its first rhino — a few-weeks-old female calf — during the flood of 2002. After hand-raising it for about three and a half years, the rhino was then reintroduced to the wild in 2006.

Over the years, the team has rehabilitated 14 such hand-raised rhinos. Two of these calves were returned to Kaziranga. Twelve others made their way to Manas National Park, a protected area in northern Assam that once boasted of more than 100 rhinos that went extinct during a <u>decadelong period of political instability in the region</u>. With the return of peace in 2003, and the restoration of habitat and security, the park is once again on its way to become an important rhino refuge.

The rhinos released into Manas seem to tell a story of success.

"Three of the released female rhinos that we rescued as babies have become mothers in Manas," Barman said. "Two of them even gave birth to their second babies. Unfortunately, one of these females recently [died]. She was probably ready for her third, but she died because of infighting with another rhino, which is normal. They do fight since they are solitary animals. Still, she has contributed twice in the wild."

The fate of the nine rhinos currently growing up in CWRC is yet to be decided. The calves are still too young, Barman said, but they will be released either into Kaziranga or Manas, or both. Raju Kuttum, who has been an animal keeper at the center since 2008, feels conflicted. "When we release the rhinos into the wild, we feel bad because we've raised the rhinos like our own babies," Kuttum said. "But the rhinos can't stay here forever, it's not good for them. I