

Following an historic agreement between the governments of Indonesia and Malaysia to collaborate on rescuing the two-horned Sumatran rhino, there is renewed hope that they may continue to roam wild on the islands of Sumatra and Borneo, writes **Ian Wood**

# BORNEO SURVIVOR



*Opposite: the Sumatran rhino's loss of habitat is partly down to forest cover being eroded by illegal settlers growing rice and coffee. Here: horns can be used to uproot shrubs and dig in waterbeds for a drink*

**T**he critically-endangered Sumatran rhino is the only species of two-horned Asian rhino still in existence, which is tragic when you consider that these animals have roamed on earth for over 20 million years, making our 200,000-year-long cameo appearance seem like an evolutionary blink. And with fewer than 100 Sumatran rhinos remaining, due mainly to an increase in illegal hunting and habitat loss, the species is on the verge of disappearing altogether. In desperate times any good news is welcome, so when the governments of Indonesia and Malaysia agreed for the first time to collaborate to save the Sumatran rhino in April, the announcement was greeted by conservationists with cautious optimism.

The agreement was reached at the Sumatran Rhino Crisis Summit convened by the International Union for Conservation of Nature's Species Survival Commission (IUCN SSC) at Singapore Zoo. More than 130 rhino experts, government officials and scientists met to discuss the key issues before pledging to implement a two-year emergency action plan.

"Serious steps must be taken to roll back the tide of extinction of the Sumatran rhino," said Widodo Ramono, executive director of the Indonesian Rhino Foundation (YABI). "This

could be our last opportunity to save this species and, by working together as a collaborative unit, internationally and regionally, with an agreed vision and goals, a glimmer of hope has been clearly demonstrated. We need to act together urgently, hand in hand, replicating some of the inspirational successes of other conservation efforts and aim to stop any failures that might impede progress."

**“WITH FEWER THAN 100 SUMATRAN RHINOS REMAINING, THE SPECIES IS ON THE VERGE OF DISAPPEARING”**

Collaboration between Indonesia and Malaysia is crucial because the remaining Sumatran rhinos are split between the island of Sumatra, Indonesia and Malaysian Borneo. In Sabah in Borneo, there are three Sumatran rhinos in captivity and at least one in the wild. WWF Indonesia also announced recently that their monitoring teams have discovered fresh rhino tracks in an area known as Kutai Barat, in East Kalimantan, which is in the heart of Indonesian Borneo.

"Experience over the past 50 years has shown that when a wild species is on the verge of extinction, two things represent necessary, although not necessarily sufficient, prerequisites," said John Payne, who is the executive director of the Borneo Rhino Alliance. "One is bringing some individuals of the species into fenced, managed facilities to try to boost births. The other is strong governmental support for urgent action. Every Sumatran rhino will count. It just so happens that some are in Indonesia, and some in Malaysia. Thus, I am very happy that the governments of Indonesia and Malaysia plan to collaborate on [saving] the Sumatran rhino."

In terms of fenced, managed facilities, the Sumatran Rhino Sanctuary (SRS) in Way Kambas National Park, Sumatra, is a frontline project for the conservation of this species. The SRS was developed to accommodate the few remaining Sumatran rhinos living in zoos and to increase breeding opportunities. Over 100 hectares of high quality rhino habitat has been fenced and 14 people are employed, including two veterinarians. Sumatran rhinos have proved notoriously difficult to breed in captivity, although Cincinnati Zoo has enjoyed some success, with three calves born between 2001 and 2007. The SRS was able to learn →



from those experiences and, in June 2012, succeeded in producing the first ever rhino born in captivity in Indonesia.

As a longer-term objective, the SRS hopes to re-release rhinos from their captive breeding program back into the wild. In order to protect existing wild populations in Sumatra, the SRS, in partnership with other NGOs, has also established a number of Rhino Protection Units (RPU).

These highly-trained anti-poaching teams, comprising of one member of National Parks staff (armed, and with powers to facilitate poachers' prosecution) and three members of YABI staff, patrol key areas within some of Indonesia's national parks. Their role is to monitor wildlife, deactivate traps and snares, identify and apprehend illegal intruders, and investigate crime scenes. Each RPU member spends at least 15 days a month on patrol and uses field data sheets to record signs of rhino, including direct sightings, tracks, dung, evidence of feeding, and wallows. Any signs of illegal activity are investigated and where appropriate, evidence collected and arrests made.

"The SRS had invited several experts from African rhino conservation programmes, who usefully introduced the concept of creating Intensive Protection Zones – a smaller area within a national park that has a high manpower density and extra security. For example, the SRS

animals, plus consolidated wild populations in Way Kambas National Park, could be moved comparatively easily between intensive management when in the SRS, and extensive management in a surrounding protected zone. This would allow greater breeding and monitoring potential, without the substantial expense that would be involved in expanding the SRS to accommodate more animals," said Cathy Dean, who is director of Save the Rhino International.

### MEDICINAL MYTHS

The main factors behind the plight of the Sumatran rhino are habitat loss, human encroachment and poaching. China (and increasingly Vietnam) has an insatiable demand for rhino horn based around the myth that it contains medicinal properties. In traditional Chinese medicine the horn is ground up, dissolved in boiling water and used to treat a range of symptoms from fever to rheumatism. Although there are no scientific facts to support this, there is a huge burden of historic beliefs to overcome. According to the 16th century pharmacist, Li Shi Chen, rhino horn could cure snakebites and even possession by the devil.

Every individual will count in the battle to ensure the survival of the Sumatran rhino, with camera trapping used to calculate their remaining numbers.

*Clockwise from above: cooling down and getting rid of parasites in a waterhole; an anti-poaching team in Way Kambas National Park, Sumatra; animal remains and equipment confiscated from poachers; the Sumatran rhino is the smallest rhino, with the smallest horns; feeding time at a sanctuary*



© CYRIL RUOSO/FLPA, STEPHEN BELCHER/FLPA

Sumatran rhinos tend to be solitary animals apart from mothers with their calves and at times of mating.

### ELEVENTH HOUR

Rhinos need to eat about 50kg of plant matter each day, ranging from the tips of vegetation growing on the forest floor to leaves, flowers and fruit. The combination of their compact size and two horns are perfect for forging tunnels and trails through the dense foliage their tropical forest habitat.

Males have large territories that can extend up to 50 km<sup>2</sup> and although these usually overlap with rivals, they don't fight to protect them. Instead they mark their trails with urine, faeces and twisted saplings to provide signs to avoid one another.

Females reach sexual maturity around four years old and give birth to a single calf every five years or so. This long inter-birth rate is one of the factors that makes populations so vulnerable to local extinction.

A ray of hope for the long-term survival of the Sumatran rhino comes when we recall the southern white rhino. By the late 19th century this species was considered extinct until a →



## SUMATRAN RHINO FACTS

**Latin name:** *Dicerorhinus sumatrensis* (*Dicerorhinus* is from the Greek *di*, meaning two; *cero* meaning horn and *rhinus*, meaning nose. *Sumatrensis*: referring to Sumatra)

**Status:** Critically endangered according to the IUCN, with 50 per cent population decline in last 15 years

**Size:** The Sumatran rhino is the smallest of the rhino species standing between 0.9 and 1.5 metres high at the shoulder

**Weight:** 600-900 kg

**Appearance:** Short and stocky with skin covered with hair - hence their nickname 'the hairy rhino' - and two horns made of keratin. Like all rhinos, the Sumatran rhino is an odd-toed ungulate, having three toes. The rhinos also have a prehensile upper lip, used for grasping the leaves, twigs, fruit and plant tips they eat.

**Life span:** 30 to 45 years

**Speed:** Up to 50 kph

**Behaviour:** The Sumatran rhino is generally solitary



in the wild except when seeking a mate. They create tunnels through the forest using their horns and heads and enjoy wallowing in mud and visiting salt licks. The rhinos have an acute sense of hearing and smell, but relatively poor eyesight.

## DESTINATION BORNEO CONSERVATION SUMATRAN RHINO

small population of less than 100 individuals were discovered in the Umfolozi-Hluhluwe region in KwaZulu Natal, South Africa. Now, after more than a century of protection, their numbers are about 20,000, making them the least threatened of any rhino species.

### DECISION TIME

“The next two years are critical: it’s essential that the Indonesians and Malaysians are able to cut through any red tape so that they can create and then implement the two-year emergency plan,” said Cathy Dean, director of Save the Rhino International. “International donor agencies are keen to help where we can. We know that it is possible to save species when they’re down to small numbers – think of the southern white rhino – but it needs determined individuals with the authority to make things happen.”

In June 2012, the president of Indonesia, Susilo Bambang Yudhoyono, pledged his support behind the International Rhino Year Campaign when he called on the nation to, “make the preservation of rhinos part of an effort to establish our nation’s reputation as one of the global leaders in environment-oriented economic development.”

Now is the time for concrete action to back up these words. By the time the international rhino year ends in June this year, we’ll know whether the emergency two-year action plan to save the Sumatran rhino has been agreed upon. Then will come the challenge of enforcing it at both national and regional levels. But if successful, the spin offs for conservation go far beyond saving one species. Protect the Sumatran rhino and by default you conserve areas of threatened habitat that are also home to many other endangered animals, including the Sumatran tiger. **WT**



Above: the Sumatran rhino's unique hair helps the mud that protects its skin to stick. Top right: with a warden

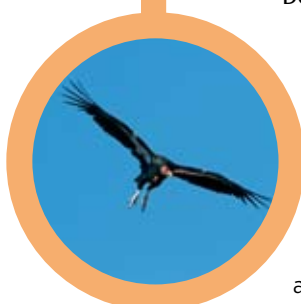


## REMARKABLE RECOVERIES

The other global wildlife that has successfully been rescued from the brink of extinction

### CALIFORNIA CONDORS

By the mid 1980s the population of California condors was down to just nine individuals due to loss of habitat and poisoning from lead ammunition. These birds were moved into conservation breeding programs as part the strategy behind the California Condor Recovery Program. In 1992 they re-introduced the condor back into the wild, establishing two populations - in California and Arizona. The species seems to be slowly recovering.



### SOUTHERN WHITE RHINO

This species was considered extinct until a population of less than 100 was discovered in the Umfolozi-Hluhluwe region in KwaZulu Natal, South Africa in 1895. Now, after more than a century of protection, their numbers have recovered to about 20,000, making them the least threatened of any rhino species. Smaller re-introduced populations outside of South Africa are found in Namibia, Botswana, Swaziland and Zimbabwe.



### AMERICAN ALLIGATOR

Alligator skin was a lucrative commodity leading to these animals being hunted virtually to the brink of extinction by the first half of the 20th century. In 1973 the Endangered Species Act made alligator hunting illegal and laws were passed to protect large parts of its habitat. Today the estimated wild population exceeds a million and this animal is now classified as least concern by the International Union for Conservation of Nature.



### CHEETAHS

Cheetahs are the most threatened of Africa's cats, but the reasons lie unexpectedly far back in time, when they came very close to extinction. By studying enzymes, scientists think that about 10,000 years ago, fewer than eight were left. The cheetahs' only means of survival was by interbreeding, leaving them with a tiny gene pool. This lack of genetic diversity has severely weakened them, with low rates of reproduction and high rates of infant mortality.

