

FOREWORD

This study is a brief introduction to the Sloth Bear and the problems which threaten its survival. Detailed observations may be found in books listed in the bibliography. In comparison with other bear species such as the Polar Bear and Grizzly Bear, there is relatively little written about the Sloth Bear.

The study also covers the first bear sanctuary set up in India, at Sur Sarovar, Agra, originally financed by the World Society for the Protection of Animals (WSPA) and run by Kartick Satyanarayan and Geeta Seshamani, co-founders of Wildlife SOS, an Indian charity. The bear sanctuary is now backed by International Animal Rescue, based in Sussex, England, which has made the sanctuary a focal point of its animal welfare programme.

I would like to acknowledge all those mentioned in the short bibliography and dedicate this brief study to the Sloth Bears, to those in the wild and those in captivity.

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THE SLOTH BEAR

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1. DISTRIBUTION

It is difficult to estimate the total world population of Sloth Bears. The numbers could be anything from 8,000 to 20,000 bears. Good estimates are not available and population trends in most areas are unknown. Any accurate estimate is difficult because the bears travel from one area to another, so that the animals could be counted more than once.

Sloth Bears are found only in Sri Lanka, Nepal, India, Bangladesh and Bhutan. In the 1940s, Sloth Bears were widespread in Sri Lanka, India as far north as Assam, along the base of the Himalayas and west to the Great Indian Desert. Fossils have been found in this area, showing that the Sloth Bear probably evolved here. The bears live in a variety of habitats: teen and sal forest, lowland evergreen forests, hill country and up to elevations of 1,700M (5,500ft). They are also found in riverside forests and tall grass areas on the floodplains of Nepal, and in the Brahmaputra Valley of Assam.

In the 1960s, it was estimated that there was one Sloth Bear for every 21KM in the National Parks of Sri Lanka. In the 1970s and 1980s, there was twice that density in the Nepal Royal Chit wan Park.

The bears move from one habitat to another, depending on the seasons and food supplies available, so they may move from grasslands to sal forests, from thorn scrub to evergreen forests, and vice-versa. During the dry season, for example, in the Royal Chit wan National Park, the bears prefer the alluvial grasslands because of the high density of termites but, during the wet season, they move to the sal forest because the grasslands get flooded.

In India, the bears rely less on termites and other insects, placing greater reliance on fruits of different kinds. In Tamil Nadu, fruit appears to form 90% of the bears' diet. In a thorn forest (Mudumalai) which has the largest number of termite mounds, there were no bears present as they had been forced to leave the area because of heavy grazing by domestic cattle and because of the human population. In Nepal, bears are rarely seen where humans have settled.

In many areas, the number of bears has declined because of the intensive deforestation, habitat destruction, poaching, confrontation with humans, agricultural developments, and the expansion of industry. The decline in bear numbers has also come about because of their low breeding rate. Competition between bears and humans has led to the indigenous people developing resentment towards the bears, so that getting them to accept or protect the animals is difficult. In order to survive, the bears need not only sufficient space in which to live, but also greater understanding.

In Sri Lanka, where bears were once widespread, upland forests have been converted to tea and coffee plantations, so that the bears are now found only in the northern and eastern lowlands.

In India, Nepal, Bhutan and Bangladesh, distribution is patchy, and corresponds to the remaining forest cover. To the north, they are found in the lowlands of Nepal. Sloth Bears are basically lowland species, but they are also found in the Siwalik Hills, which border the outer range of the Himalayas, extending from Arynachal Pradesh to Punjab. The bear population of Nepal is no longer continuous with that of India, because of the development of human settlements. To the East, the bears' range stretches through Southern Bhutan into Assam, Manipur and Arunachal Pradesh. In the early 1970s, the bears vanished from the sal forest in central Bangladesh, though some may still live in the evergreen forests of Chittagong and Sylhet.

In India, Sloth Bears were once so common that hunters on horseback could kill them with spears. By the late 1800s, they began to decline with the expansion of railways to remote areas of the country. During the 1940s and 1950s, there was a sharp decline in the number of bears. This was noticeable with the decrease of dancing bears on the streets. The destruction of forests, which was begun in the 1800s by the British, continued and gathered momentum once India gained its independence in 1947.

Sloth Bears are the most widespread of the bear species in India. They overlap the range of Asiatic Black Bears in Northern India. Sloth Bears, Asiatic Black Bears and Sun Bears co-exist in some of the national parks and wildlife sanctuaries. The three species are also found in Assam, Manipur and Mizoram, in the hills south of the Brahmaputra river, the only places occupied by all three bear species.

2. GENERAL INFORMATION AND APPEARANCE

The Sloth Bear is known as:

Melursus ursinus or Ursinus ursinus in India, Nepal, Bangladesh and Bhutan.

and as

Melursus ursinus inornatus in Sri Lanka.

The Sloth Bear also has a variety of “common” names in the different countries:

1. N. India and Nepal: Bhalu
2. India: Ririch, reachi, richwa, asval, karadi,
Jouni karadi, chigu bunti.
3. Sri Lanka: walaha(male), walahinna(female), Karadi.
4. Bhutan: doni
5. Bangladesh: bhaluk

The bear is, however, usually known as the Sloth Bear. For some years, the Sloth Bear was known as the Bear Sloth, because hunters in India thought it was a relative of the South American Sloth. Both animals have arboreal habits and both have long, curved claws. At the end of the 18th Century, the Sloth Bear was called the Ursine bradypus or Ursiform Sloth and given the name Bradypus ursinus. It was only at the beginning of the 19th Century, when a Sloth Bear was shipped to a zoo in France, that scientists realised the animal was a bear and changed its name from Bear Sloth to Sloth Bear.

APPEARANCE

The Sloth Bear is approximately the size of the American Black Bear. It is 152cm – 183cm (5ft – 6ft) in length and stands at 60cm – 90cm (2ft 2ins – 3ft) at the shoulder. When standing, it is between 152cm and 183cm tall (the same as its length). As with all bears, the male is bigger than the female. A male adult weighs 80KG – 145KG and a female adult weighs 55KG – 95KG, although larger bears have been found. A male bear weighed in at 192KG and an adult female weighed 124KG.

The Sloth Bear has a long, shaggy coat with no underfur. Generally, the bear is black, though there may be brown hairs in the coat and some individuals

may be more brownish in colour while an albino bear is very rare. The fur is very long round the neck and at the back of the head, forming a ruff. The fur can be up to 15cm in length. **The Sloth Bear is the only bear which has long hair on the ears.** Like all bears, the Sloth Bear has small eyes relative to the size of its face, although it has good eyesight. There is a tendency to believe that all bears have poor vision, but this is not the case. Bears usually have eyesight equivalent to that of the average human.

The muzzle is long and whitish-grey or white in colour. The hair on the muzzle is very short and the bear can voluntarily close its nostrils. It has a hollowed, bony palate, extremely mobile lips and a long tongue. The bear has 40 teeth, but the upper two middle incisors are missing.

The chest has a white or rusty/yellowish-white chevron, which is usually broad and either V- or W -shaped. The front paws are turned inwards and have long, slightly curved, ivory-coloured claws, which are 6 – 8cm long. The back claws are shorter. On the front paws is an extended pad on the outside, which allows the bear to grasp items more easily and helps it to gain a good grip when climbing trees. The Sloth Bear, like all bears, can move fast over short distances, but it usually ambles along with a shambling gait, only breaking into a gallop when necessary.

In the wild, if left in peace, the Sloth Bear can live up to 25 years, in some cases for longer. Life expectancy in captivity varies, but is usually lower, especially when the bears are used as dancing bears.

3. FEEDING

The Sloth Bear is myrmecophilous, that is to say that it eats ants and termites. In fact, the bear's diet is much more varied. The Sloth Bear feeds over wide areas, sniffing the air and ground to locate food. Periodically, the bear will emit a loud, staccato sound, when it locates a termite mound or ants' nest. It uses its long claws to break the nest open, then it blows away any dust or dirt, extends its long tongue and sucks the insects into its specially adapted mouth, making a noise that may be heard up to 100m (or even further) away. The short hair on the muzzle is thought to be an adaptation to help the bear deal with the unpleasant excretions made by the termites. Long hair or fur on the muzzle would make this difficult. The bear's ability to close its nostrils protects the animal from inhaling dust, dirt and angry termites. The missing incisor teeth, together with the mobile lips and long tongue, make the ingestion process easy. The bear's strong claws not only smash open termite mounds, but are useful in tearing logs apart and act as digging tools when the bear is looking for food.

The Sloth Bear may travel distances of between 10–15km every night in search of food. The bears usually feed at night, though may also be seen foraging during daylight hours. A female with cubs will eat during the day to avoid night-time predators such as the leopard. Although specially adapted to feed on ants, termites and other insects, the Sloth Bear needs a more varied diet. Ants and termites provide only a low metabolic rate diet, which is inadequate, so the bear needs supplemental food. The bear's long, shaggy coat is thought to help the animal to overcome problems associated with a low metabolic rate diet. Apart from ants and termites, Sloth Bears also eat longicorn beetles and dung beetles. They will also take carrion and the occasional small mammal, amphibian or reptile. They feed, too, on several different fruits, including ber, jambul, mangoes, jackfruit, lantana, bael, malma, mulberries and Banyan wild figs.

Sloth bears also love mohwa flowers to eat. These bloom in the spring in India. Humans also love the flowers, making a drink from them. Sadly, the competition for the flowers brings humans and bears into conflict. Conflict also occurs when the bears raid crops such as sugarcane, corn, peanuts and yams. The bears are forced into conflict situations when humans destroy the animals' habitat.

Like all bears, the Sloth Bear is an opportunist. It also loves honey and will climb trees to raid wild hives. It climbs trees, too, in its search for fruit. Bears have been seen to shake branches to make the fruit fall. On occasions, a bear will shake the branches while another bear feeds on the fallen fruit. Between March and June 50% of the bear's diet is fruit and the other 50% consists of termites and other insects, termites being a dietary mainstay for the

remainder of the year.* Unlike other bear species, the Sloth Bear regularly drinks water, especially in the hottest months of the year.

4. BREEDING

Sloth Bears usually mate between June and July, although births may occur at other times of the year. The cubs are born between November and January after delayed implantation. Courtship is brief and is marked by play-fighting and hugging, while mating is a noisy affair. During the breeding season, groups of three or four males may be found near receptive females and all may breed, apparently in rank order. Females begin to breed when they reach four years of age.

After a pregnancy of 5 – 7 months, the cubs are born in a den. This may be a scraped out earth den, or may be below a boulder or under rocks. The cubs are tiny when born and have their eyes shut. They are completely helpless at this stage. Their eyes open after one to two weeks. The mother bear suckles her young and may not leave them to get food for herself in the early days after the birth. When she does leave them, she stays near to the den and is only absent for very brief periods. The cubs vary in how quickly they achieve independence, but generally stay with their mother for at least two years and more often for two and a half years, learning from her the skills they need to survive. As a result, the mother bear can only reproduce every two to three years. The female raises her cubs by herself, as the male leaves after mating.

The cubs stay in the den for between two and three months. When they emerge, they ride on their mother's back, travelling in this way until they are a third of their adult size, when they are about 9 months old. The cubs scramble for position on her back, the strongest cub taking the prime position on her shoulders. There are usually two cubs in a litter, although there may, occasionally, be three. Carrying two cubs on her back is relatively easy for the mother bear, whereas carrying three is more difficult. The cubs get a good grip on her back as the fur is longer there. Travelling in this way protects the cubs from possible predators as the mother does not have to worry about the cubs being able to keep up with her. It also conserves their energy. Although cubs of other bear species will sometimes climb on their mothers' backs, the Sloth Bear is the only bear to carry her young on a regular basis.

Sloth Bear mothers, like other female bears, are very possessive and protective of their cubs. They will go right up to hunters and trappers, regardless of the danger, in order to protect their young. Like all bear mothers, they are also very loving and affectionate with their offspring, although they will cuff one round the ear for any dismeamour or sign of disobedience. It is important for the mother to discipline the cubs because they need to learn about danger and how important it is to obey her if they are threatened by predators.

Adult males, and females with cubs will share the same territories, simply marking trees and logs to warn other bears of their presence. They make grooves in tree trunks and logs with their claws, use urine for scent-marking

and rub their bodies on trees to produce a similar effect. Marking may also help with avoidance tactics by males or act as an incentive to bring males and females together. Males rarely kill cubs, since Sloth Bears are the most sociable of the bear species.

5. BEHAVIOUR

Sloth bears do have predators, notably wild dogs, leopards, tigers and humans, while elephants and rhinos also command respect. When threatened, Sloth bears may flee or make a “bluff” charge, stopping at the last minute and rising up on their hind legs to threaten. The charge rarely ends in a full-on confrontation. Like all bears, the Sloth bear prefers to avoid conflict with its own species, with other bear species and with other animals. It will avoid situations where it is likely to put itself in danger, but will fight if it has to, especially if the bear is a female with cubs. Although the Sloth bear is an agile climber, in threat situations it is likely to avoid trees as a means of escape, since predators may be lying in wait. Leopards, in particular, pose a danger, since they are also agile climbers.

On the whole, Sloth bears are non-aggressive towards other bears and any marking behaviour would appear to be linked to social spacing rather than acting as a serious warning to other bears. The fact that Sloth bears, Asiatic Black bears and Sun bears can co-exist in the same ranges, indicates non-aggressive behaviour on the part of all three species. Fighting between males is rare. Should it happen, injuries can be severe and sometimes fatal. Flight is considered a better alternative. Generally speaking, the bears live in harmony and, although they are reputed to be solitary animals, both Sloth Bears and Brown Bears (in Canada) do congregate together when there are ample food supplies. Unlike Brown Bears, however, Sloth Bears will also gather together even in the absence of food. Siblings will sometimes stay together for a period ranging from a few weeks to a year, and even unrelated bears have been found to pair up for varying periods of time.

Major aggression is reserved for enemies such as tigers, leopards, wild dogs, elephants and rhinos, or when a conflict occurs because of confrontation with humans. An interesting incident occurred when a Sloth Bear encountered a jackal in India (Valmik Thapar). The Sloth Bear made a mock attack, then loped off pursued by the jackal. The bear could easily have killed the jackal. Instead, it gathered speed as it ran off, the jackal snapping at its hindquarters. The bear made no attempt to harm its pursuer, an indication, perhaps, that it is not by nature aggressive.

Sloth Bears are very vocal, using a wide repertoire of sounds. They use howls, roars, yelps and squeaks. They also use facial expressions and body language for communication with one another. One of their vocal calls is very rarely used and may be a long distance communication signal. A “huffing” sound is used as a warning and a “chuffing” sound is used as a non-aggressive “voice” when the bear is distressed. High intensity threats include roars, squeals and screams. Cubs yelp when distressed and a female with cubs uses a grunting “whickering” sound to communicate with them. This can be an alarm contact sound, although it may also be a reassuring communication. The loud,

staccato sound made when the bear has located termites or ants may be one of excitement or pleasure. Sloth Bears will also suck their paws and hum, as do other bears, particularly the cubs. This may be a sign of contentment or of self-consolation, much as a baby sucks a dummy.

The Sloth Bear does not hibernate. Bears hibernate when food is unobtainable or in short supply, hence the need for Canadian Brown bears to build up their weight by feasting on salmon in the autumn. The warmer the climate, the less the need for hibernation, since there are food supplies available, such as fruit and berries. Where the Sloth Bear is concerned, there are also crops grown by humans, an easy way of finding food supplies, especially when the natural habitat has been destroyed.

The Sloth Bear is shy and elusive, so comparatively little is known about its specific habits. More studies need to be carried out to discover more about its natural behaviours, for example, how much of its time it spends in trees, the meaning of its communication sounds, etc.

6. THREATS TO SLOTH BEAR POPULATIONS

As we have seen, the numbers of Sloth Bears are difficult to assess. What is certain is that the Sloth Bear, like so many bears, is on the endangered list, though the threats to its existence remain and, as human populations expand, become even greater.

Continuing habitat loss and degradation of habitat in India, pose major problems and, outside protected areas, numbers are declining not only in India, but also in Nepal and Sri Lanka. If there are still Sloth Bears in Bangladesh, their future is doubtful, since protected areas there are heavily encroached upon by human activities. The situation is not helped by the underfunding of forest departments, with staff and facilities totally inadequate to protect any remaining bear populations. The most promising outlook for Sloth Bears is in Bhutan, where the Royal Government is committed to protecting them. The result is that, along the southern border and in the nearby forests, Sloth Bears are fairly common.

Protected areas in India, Sri Lanka, Nepal and Bhutan, cover about 53,400 km²:

India 45,000 sq km

Sri Lanka 3,000 sq km

Nepal 2,400 sq km

Bhutan 3,000 sq km

Bear population densities vary, for example in two sanctuaries specifically for Sloth Bears, there are between 77 and 124 bears per square km, whereas the average density for all 23 protected areas is 12 bears per 100 sq km. Applying average density to the 45,000 sq km of parks and reserves in India, would yield a population of 5,000 Sloth Bears in protected areas, but there are also 250,000 sq km of potential Sloth Bear range outside these protected areas, hence the difficulty of registering exact numbers and population density.

Sloth Bears are completely protected under Schedule 1 of the Indian Wildlife Protection Act of 1972, amended in 1986. The bears cannot be hunted, but can be killed in self-defence, or in special circumstances where they have caused damage. All trade and export of the bears is illegal as the bears are listed under CITES Appendix 1. The only movement of bears allowed around the world is when they are in captivity and are moved from one zoo to another.

In India there are three sanctuaries in Gujarat : Jessor, Rataumal and Shoolpaneshwar. Bears are also protected in parks and reserves which were

established as part of Project Tiger in 1972. Corbett, Kahna, Buxa, Manas, Ranthambore, Bandipur and Periyar parks and reserves

All have Sloth Bears. Apart from these reserves, however, there is little direct management or protection of Sloth Bears.

In Nepal, forest clearance has narrowed the range of Sloth Bears, which were once found the full length of the Nepal Terai. A huge human population explosion, from the 1960s to the 1980s, led to the destruction of forests along the major rivers, and conversion to land for agricultural use. The Sloth Bear population is now mainly limited to the Terai, the southern strip of lowland forests and the grasslands bordering India, although there is now no connection with the Indian Sloth Bear populations, as the border lands have become agricultural areas. Northward, the bears range extends into the Siwalki Hills, which have an elevation of between 750m and 12,500m.

Nepal has three protected areas: The Royal Chit Wan National Park, the Parsa Wildlife Reserve and the Royal Bardia National Reserve. In Chit Wan, during the dry season, a study revealed a concentration of bears at 70 per 100 sq km, in the alluvial grasslands. In the wet season, the bears use the sal forests in the upland area, covering 70% of the Park, giving an overall density of 25 bears per 100 sq km. The Sloth Bears' range is continuous from Chit Wan to Bardia. The overall population is estimated to be no more than 1,000 bears, possibly even fewer, however, the fact that the range is continuous helps to maintain a healthy population, since the likelihood of inbreeding amongst a small group of bears is rare, with the animals able to travel from one area to another.

In Nepal, the National Parks and Wildlife Conservation Act, Number 2029, protects Asiatic Black Bears but not Sloth Bears. The latter can be killed legally to protect humans or their property. Hunting with a licence is legal, though few bears are hunted, the main threat being loss of habitat and increasing human activity. There is some poaching which, with such small numbers, is detrimental to population viability. Sadly, the poaching of tigers and rhinos makes the bears vulnerable, too. Records from 1990 – 1993 show that Nepal is the second largest source of gall bladders for South Korea, from both Asiatic Black Bears and Sloth Bears.

Bears are absent from much of the forest in the Terai and have been relegated to the hills in many areas, which border the lowlands. Although there are many termite mounds in the forests, human activity has driven the bears away, depriving them of their major food supply. Ironically, protected areas with Sloth Bears exist today because of their former status as hunting reserves.

People were forced to leave the protected areas in the Terai. Though the bears receive greater protection from land degradation and from poaching, there is

no specific management for Sloth Bears. However, in the Chit Wan National Park, there is specific habitat management which benefits the bears. The people are allowed to burn grass once a year and also cut it for building purposes. This maintains the grasslands and also encourages new growth for grazing animals. It also enhances conditions for the termites which, in turn, benefits the bears.

In the mid-1970s, bears from the Chit Wan National Park occasionally raided crops, but today they rarely do so because there is adequate food for them in the Park. Restrictions on the use of the Park by humans has also helped the bears. Occasionally people are mauled by the bears during the annual grass cutting. Since the bears no doubt view the humans as encroaching on their territory, this is not at all surprising, though encounters may be accidental.

The Royal Chit Wan National Park would be ideal as an education centre. Its history shows the need to protect such habitats. The uniqueness of the Sloth Bears, related to their feeding habits, makes them a powerful example of how animals adapt to, and exploit, their environment, and how reliance on specific habitats and foods makes them vulnerable to extinction. The Park is also proof that, if the bears have adequate food supplies, they do not kill livestock and only rarely raid crops. Other parks and reserves could benefit from this example. What is needed in Nepal is for the Sloth Bear to be granted the same protection as that given to the Asiatic Black Bears.

The three major threats to the Sloth Bears are:

1. Deforestation
2. Habitat degradation
3. Poaching

The loss of forested areas outside parks and reserves in India, Nepal and Bhutan, has caused the fragmentation of bear populations, leaving small and non-viable groups. Even in the parks, numbers are relatively small. This can lead to in-breeding, with a limited gene pool, which can result in weaker individuals and, ultimately, extinction.

Habitat degradation and the development of land for agricultural or industrial use have seriously affected the bears. Overgrazing by domestic livestock damages the grasslands. The over harvesting of forest products, such as timber, fruit and honey, and the introduction of tea, rubber, teak and eucalyptus plantations, has decimated the bears' natural habitat. Agricultural development has spread rapidly as have settlements for refugees. Every piece of land taken by human activity decreases the bears' living room. In turn, these activities have diminished the animals' food supplies. Loss of food

supplies tends to limit reproduction, further decimating the bear populations. Poor natural food supplies lead the bears to raid crops to survive and, taking sugarcane, corn and peanuts outside the reserves makes the bears even more vulnerable and liable to be killed as nuisance bears. For example, in Ramnagaram Taluk, 50km southwest of Bangalore City, the lack of natural foods led the bears to rely on crops for 50% of their diet. It is ironic that the bears should be killed for raiding crops when it is humans who have deprived them of their natural food supplies.

Although Sloth Bears, like other bears, have a reputation for being aggressive, they tend to avoid confrontation. However, contact is unavoidable when the bears raid crops or when humans encroach on the bears' territory. Fear of the bears makes it difficult to stimulate measures to protect local bear populations. Sloth Bears are particularly vulnerable as, being shy, they are very susceptible to disturbance. They are, therefore, not helped by such developments as hydro-electric plants, nor does it help that termite mounds are destroyed to provide the fine soil used on tennis courts!

Poaching of endangered and vulnerable species is rife in many places and poses a major threat to all bear species. During the late 1970s and 1980s, parts from Sloth Bears were shipped from India to Japan. It was estimated that parts from Sloth Bears alone amounted to the deaths of between 700 and 1,500 animals every year. Gall bladders and other body parts are shipped to Singapore, Hong Kong and Bangkok and then sent on to Taiwan, South Korea and Japan. In 1966 it was found that poaching and the trading in bear parts were common in Uttar Pradesh, Himachl Pradesh, Madhya Pradesh and West Bengal. Bears are regularly poached in eastern India, Mizoram, Manipur and Assam, with poachers coming over the border from Myanmar some poaching occurs not only for body parts but also because there are superstitious beliefs about the powers of bears. In addition to poaching for gall bladders for oriental medicine and fat, used as hair restorer, the penis bone is regarded as a magical cure for impotence, and bears' claws are supposed to be protective charms. The poaching of bears for the dancing bear trade is also widespread. The mother bear is killed and the cubs are captured and trained for street entertainment, with some of the cubs being sent on to Pakistan to be used, when adults, for bear-baiting.

Poaching is considered a lucrative trade and a relatively easy way of making a living. Until all poaching is stopped, the bears will continue to suffer and die and their existence will be increasingly threatened.

7. THE DANCING BEARS OF INDIA

An estimated 600 sloth bears are used as dancing bears in India.

The dancing bear tradition dates back to the 16th century in India, when bears were forced to dance for the entertainment of the ruling classes. In recent times, they have been used to beg money from tourists who, sadly, appear to relish the novelty and thus perpetuate this cruel practice.

More than 100 cubs per year are taken from the wild. If a female bear produces, on average, two cubs, this indicates that up to 50 female bears could be shot during that period, seriously affecting the number of bears in the wild. The majority of cubs taken from the wild do not reach the villages of the Kalandars, the nomadic people who train the bears. The cubs, purchased for about 8,000 rupees each from markets, often die on the journey to the villages, from trauma, dehydration or starvation. The Kalandars, originally Muslim gypsies, often now have alternative occupations, but it is still a matter of pride to teach a bear to dance, the trainer gaining great respect from his peers. The Kalndars are still nomadic; those in the south moving every few days from place to place, while those in the north move from one family settlement to another.

The training of the bear takes from 6 months to 2 years. The cubs are between 4-6 months old when they begin training, provided of course that they have survived earlier trauma. Any cubs which reach the villages after the ordeal of the journey from the market are tied to posts in sight of each other, but unable to touch, so that they are unable to derive comfort from their own kind. It is impossible to appreciate the trauma experienced by the cubs, which have often seen their mothers shot in front of them. The cubs, often tiny, and totally dependent on their mothers, are roughly handled by the poachers and endure severe shock compounded by fear. Should the mother bear survive, it is certain that she, too, suffers deeply the deprivation of her cubs.

Between 60% - 70% of the cubs die before they can be trained, so further cubs are then taken from the wild. Any cubs which do survive suffer a punishing regime of beating and starvation to make them submissive to their trainers. As cubs spend at least two years with their mothers, it is not difficult to imagine their fear as they are subjected to an existence which is not only ridden with pain but also totally unnatural.

The cub's muzzle is pierced with a red-hot poker, without the use of anaesthetic, the poker forced through the bone, cartilage and nerve membrane in the top of the muzzle, creating a terrible wound. A rope is then pulled through the wound, usually causing an infection. In many cases a second piercing is necessary, usually before the first wound has healed. The pain must be excruciating and is exacerbated as the trainer pulls on the rope forcing the cub to stand upright. The bear is then hit on each hind paw with a stick. To avoid the pain, the bear lifts each foot in turn. Eventually, the trainer has only to strike the ground for the bear to lift its feet. It is now a "dancing" bear. A tap on the muzzle causes the bear to fold its paws over its nose in a gesture of "greeting" to amuse the audience.

The bear is taught to fear its owner, a simple matter when the animal is small. As the bear gets bigger and stronger, the owner, needing to exert full control, reinforces the fear by hitting the animal across the face with sticks and ropes. If the bear shows any sign of rebellion, the rope through the muzzle is forcibly pulled to make the bear stand and, in many cases, the muzzle is re-pierced to exert control through further pain. Amazingly, in spite of the appalling treatment they receive, the bears seem to develop a good relationship with their owners, though this may be the result of submission and the need to accept their fate in order to minimise the pain and suffering. This can happen with other animals when the spirit is broken. Such treatment is totally unacceptable and offensive.

Before the cub is a year old, its teeth are knocked out with a hammer and its claws are pulled out with pliers. Neither operation is carried out using any kind of anaesthetic. The bear is not allowed to eat its normal diet. Some are fed on chapattis, lentils and sour milk, or given steamed raji balls, wheat rotis and bread. Some Kalandars claim to feed their bears on cereals, fruit and honey, this is rarely, if ever, the case. Such an inadequate and unnatural diet leads to severe intestinal problems for the bears, the condition often painful and, in some cases, terminal.

At least 20% of the cubs die from stress. A further 20% prove to be untrainable as dancing bears. What happens to them is unclear, but it is possible that they are sold on to circuses or menageries, where they continue to lead a miserable existence.

Once trained, the bears travel on the roads with their owners for eight or nine months of the year, often over long distances and mostly on foot, although some Kalandars may occasionally hitch a lift on a lorry. On average, the bears work for about 6 hours a day, but up to 10 hours for special occasions such as weddings, festivals and fairs. On the road, while waiting for clients, the trainer may allow his bear to have enough leeway on the rope to forage by the roadside for ants or other insects, but the animal is kept on a short rope in towns because of the crowds of people.

Life on the road is hard for both bear and owner, no form of medical help is available for either while they are travelling. The bears may suffer, and die, from stress, training methods, gastro-intestinal disorders, respiratory diseases and worm infestations. When medical help is needed, the Kalandars rarely consult a vet, preferring instead to ask village elders for advice.

Twenty per cent of the cubs die because of the shock of separation from their mothers, between 20% - 40% die during transportation, and 10% die during early handling. It is also estimated that 40% of the cubs die during their first year. There is no consolation in such a high mortality rate, yet at least those cubs are spared further suffering.

The above figures indicate a dreadful waste of life and show the contribution that the trade in dancing bears makes to the decimation of bear populations. These figures do not take into account the number of mother bears killed nor the future potential loss of cubs. The fact that so many cubs die only encourages poachers to perpetuate their appalling trade in order to satisfy the demand for dancing bears. Bear cubs may be found tied up at markets and fairs, waiting to be taken on a journey to hell. The trade will continue until the Wildlife Protection Act (1972) is fully enforced, but there are signs of hope. At least for some of the bears, with the building of the first sanctuary for dancing bears at Sur Sarovar, Agra.

8. INDIA'S FIRST SANCTUARY FOR DANCING BEARS

In 1998 land was offered to an Indian charity, Wildlife SOS, to build the first ever rescue centre for bears in India.

In 1999 construction of the sanctuary began within the Sur Sarovar Bird Sanctuary near Agra, a 2000 acre forestry department owned conservation area, just a few miles away from the world famous Taj Mahal.

In December 2002, the sanctuary was completed with joint funding from UK charity, International Animal Rescue, and the Australian group Free The Bears Fund. The first six bears were rescued on Christmas Eve. The site is secure, with a walled perimeter and electric fencing. It has man-made dens, several large pools, quarantine dens and socialisation areas, a state of the art veterinary clinic and laboratory, food preparation and storage rooms. The aim is to make the bears as comfortable as possible and the sanctuary is as close to a wild environment as possible, with artificial means being used where necessary to help the bears.

By January 2007 the number of bears rescued by Wildlife SOS and International Animal Rescue had risen to more than 350. After signing a memorandum of understanding (MOU) with the Forestry Department in the southern state of Karnataka, the two charities took on a second sanctuary in Bannerghatta near Bangalore., using the tried and tested successful methods adopted in Agra. An additional 145 acres of adjacent forest land has been acquired in Agra to allow expansion, and holding centres in Bhopal and Hyderabad are also taking in rescued bears.

KALANDAR REHABILITATION

Bears can be bought from poachers as cubs from 300 rupees (£3-£4.) Under the rescue scheme, every Kalandar willing to surrender his bear receives 50,000 rupees (£625), so that he can start up a business. So far, successful ventures include a bicycle repair shop, welding business, many motorised rickshaw drivers, weaving businesses and small shops.

In order to start up a new business and receive the financial and logistical support from the charities working to stop this cruel practice, the Kalandar must sign a legally binding contract promising that he will not acquire another bear. If he does so, he will be arrested and imprisoned for up to seven years.

One of the Kalandars, a man called Ashiq Miyan, works at the sanctuary, preparing food for the rescued bears. As a 10 year old boy he used to go from village to village with his father, with dancing bears. Now, he receives 4,000 rupees (£50) per month, the same money he would have earned with his bear, but he admits that he no longer has to "run from the police" and

acknowledges that the bears are much happier in the sanctuary. Ashiq Miyan feels that most of his tribe would be willing to give up their dancing bears if they could be given the right support.

In March 2004, seven tiny bear cubs arrived at the sanctuary. They had been rescued from men dealing illegally. The cubs had been snatched from their mothers' dens in the state of Orissa, 1,000km from Agra. Korai, where the cubs were found, is a Kalandar settlement which has been a centre for the trade in dancing bears. With luck, there is a good chance that these cubs, in spite of such a traumatic start to their lives, can eventually be returned to the wild.

Two further cubs, rescued in April 2004, had already had ropes inserted into their muzzles on the day before they were rescued, suffering agonising pain and brutality in the first weeks of their lives, having been taken from their mothers. Sanctuary staff worked to help them overcome both their physical and psychological wounds.

One of the bears rescued by the sanctuary, Chameli, arrived with her nose full of maggots and a worm burden. She was severely malnourished, having lived on a meagre diet of plain roti (Indian bread). Now her muzzle has healed and her body weight has almost doubled. She now has the thick, shaggy, black and lustrous coat which all healthy Sloth bears should have. Wary of humans she does not know, she is still a much happier bear and she is also safe for the rest of her life.

Apart from the dancing bears in the sanctuary, two new arrivals came from a "wildlife reserve" in Bondla, Goa where they had been caged, tied by a rope from their noses to the bars of their cages.

Another bear, Raju, who featured in a short film "The Final Cut" produced by International Animal Rescue, has also joined the bears in the sanctuary. The sanctuaries in Agra and in Bannerghatta are a beacon of hope for the dancing bears of India. With goodwill, funding, education and the enforcement of animal welfare laws, hopefully it won't be long before all the sloth bears still dancing on the streets of India, find a safe haven in the sanctuaries, while those bears still in the wild are allowed to roam freely and free from persecution.

Information taken from material supplied by International Animal Rescue.

9. CONCLUSION: PROTECTING THE SLOTH BEAR

The Sloth Bear is seriously endangered because of human activities: deforestation, habitat degradation, poaching and persecution. It has a unique place in the world's ecosystem because of its specialised adaptations for a specific diet. Its demise could upset the balance of the ecosystem in which it lives. The demise of any species alters the balance of nature to some extent, since species are interdependent. Nature has a way of balancing itself, it is humans who interfere and upset the status quo. In addition, this gentle and peace-loving bear deserves to be protected so that present and future generations can appreciate its uniqueness and its place in the diversity of nature. The Sloth Bear is only regarded as a nuisance because it encroaches on human activities. Humans conveniently forget that it is people who first encroached on the animals' habitat.

Ways have to be found to enable humans and bears to live alongside each other in harmony. It is possible, but can only be achieved by involving the indigenous people in all projects and in finding compromises, enabling both to have enough space in which to live. Land management is essential, to maximise the efficient use of agricultural land while, at the same time, re-planting depleted forests. People in many parts of the world have learnt, to their cost, that wholesale deforestation leads to soil erosion, landslides and devastating floods. It is therefore important to educate the indigenous people how to use land sensibly and to repair the environment where necessary. It is undertaken by major contractors.

Understandably, local people have been upset when forcibly evicted from protected areas and it is essential to show them why such areas are vital to the conservation of animal, bird and plant species and how the people themselves can be involved in projects, so that they learn to value the animals and plants. In this way, they can learn to take pride in the environment and feel that they have an important role to play in its development and conservation. Inculcating this sense of pride is essential if the animals and plants are to survive. At the same time, it is important to compensate people for any loss of livelihood, so that they will not resent conservation measures.

Education about the Sloth Bear and its way of life is also important. It is said that we only fear what we do not understand, so the people need to know that the Sloth Bear is a shy and elusive bear, that a mother bear only becomes aggressive towards humans if she feels that her cubs are being threatened, that bears raid crops only because their natural food supplies have been destroyed, and that, left in peace, the bear offers no threat. Basically, they need to know what makes bears "tick" and how, through understanding the bears' needs, they can learn to live with them. The same applies to relationships with other wild creatures on the planet.

There needs to be a major crackdown on poaching. The trade in bears and bear parts is thriving. Despite legislation, bears are threatened because of a flourishing black market. Until the demand for bear parts, and those of other animals, is curbed the trade will remain. Until the use of bears for “dancing” and bear-baiting is eliminated, the poaching of cubs from the wild and the shooting of their mothers will remain. Some measures are being taken to stop the trade in bears but only when the trade no longer exists will those measures have been effective. It is important to show the indigenous people that the bears are sentient beings and can feel pain, and that both mother bears and cubs are deeply traumatised when they are parted. Attitudes towards animals are changing, but there is still a long way to go.

Animal sanctuaries have an important role to play, for captive bears cannot always be returned to the wild. Sloth Bears which have lost teeth and claws would be helpless in the wild, unable to eat properly, to dig, climb, or defend themselves against predators. Some people claim that animals raised in captivity can never be returned to the wild, but this is not always the case and some animals have been successfully reared and returned to their original habitat. Careful preparation and a thorough understanding of both animal and habitat are essential. It is also of paramount importance that the animals are returned to a safe area. Sanctuaries provide a very necessary lifeline to those animals which will need a safe haven for life.

At present, Sloth Bears are classified as endangered in India. They are protected in Sri Lanka and partially protected in Nepal, but laws already on the statute books need to be enforced and, unless further legislation is passed and upheld, it will be impossible to halt the decline in the Sloth Bear population.

Elephants, tigers and gorilla have a high profile where animal cruelty and welfare are concerned. The plight of the Sloth Bears has only been highlighted more recently and it is now important to keep the bears in the public eye so that they are not forgotten.

Balancing the needs of the local people and the bears is a very delicate operation, but is vital in the interests of both. They cannot be treated as independent of each other and this balancing act is the key to the survival of the Sloth Bear.